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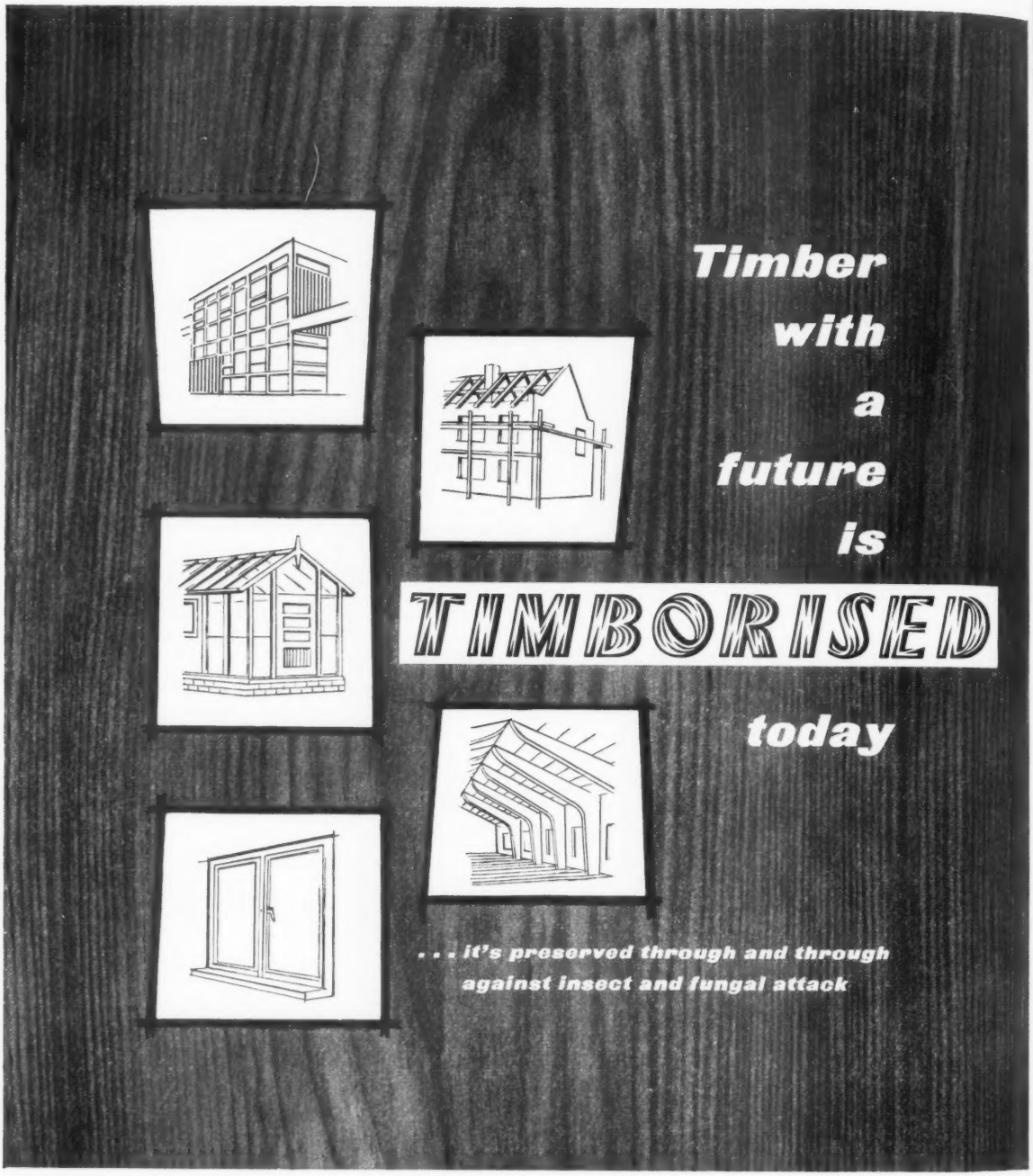

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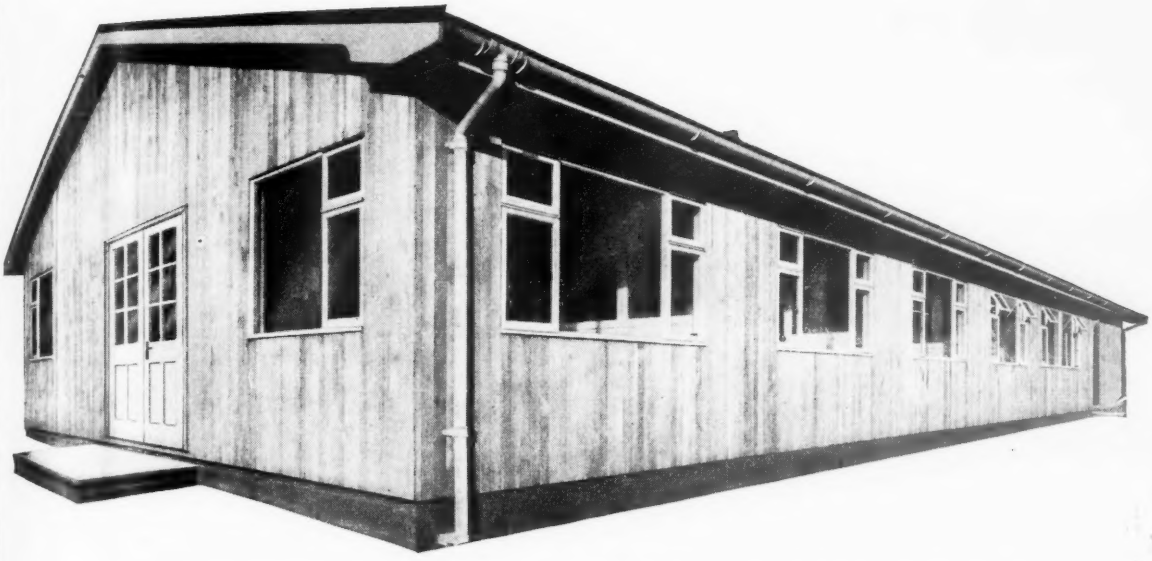

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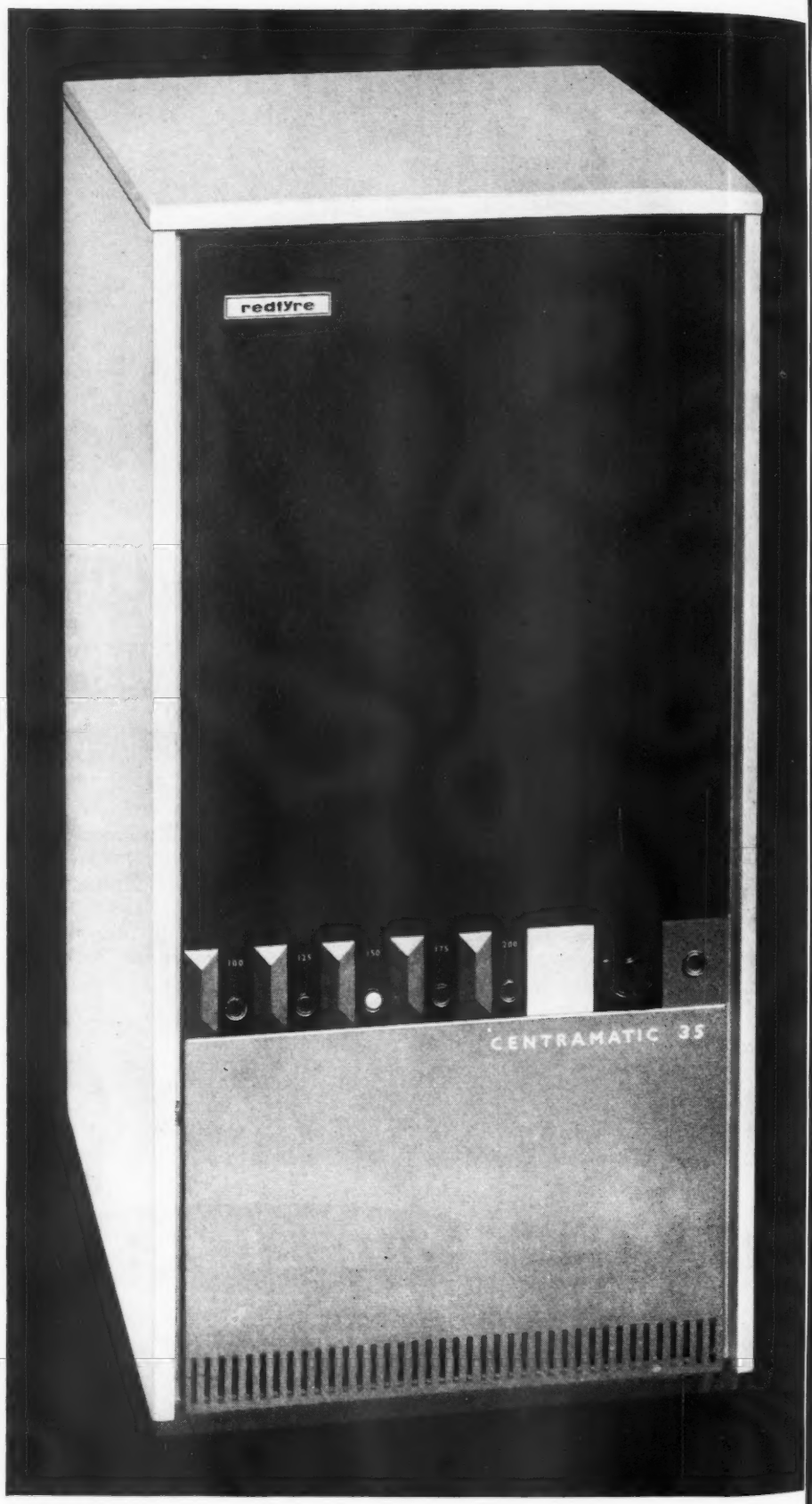

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FACTS AND FIGURES

Construction—vertical cylindrical water tube boiler made from heavy gauge mild steel with large diameter flow and return tappings, catering for gravity hot water circulation as well as small bore.

Burner Unit—patent burner incorporating electric ignition. Combustion air supplied by a co-axial fan. Burner works only at "high fire" or is "off".

Subsidiary Controls—flue thermostat and electric oil control valves and built-in automatic safety features including thermal fuse fire and valve "lock-out" device.

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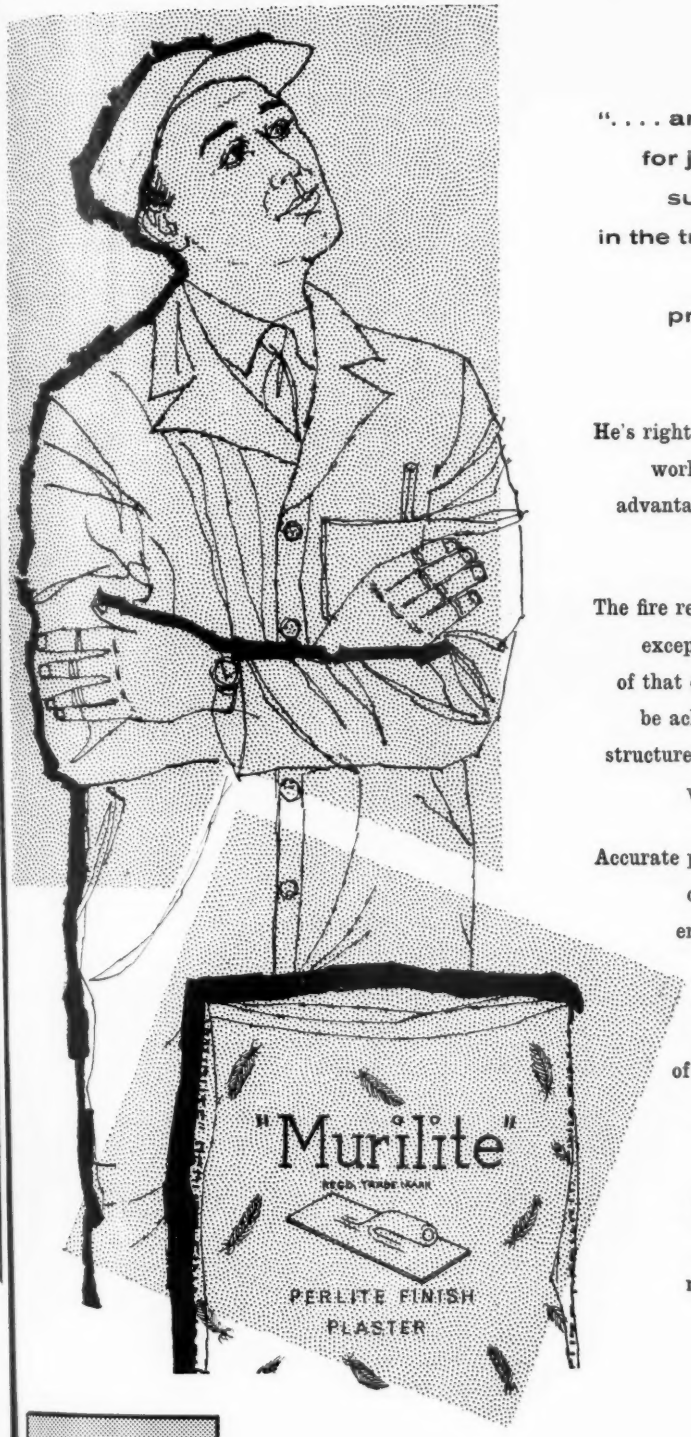

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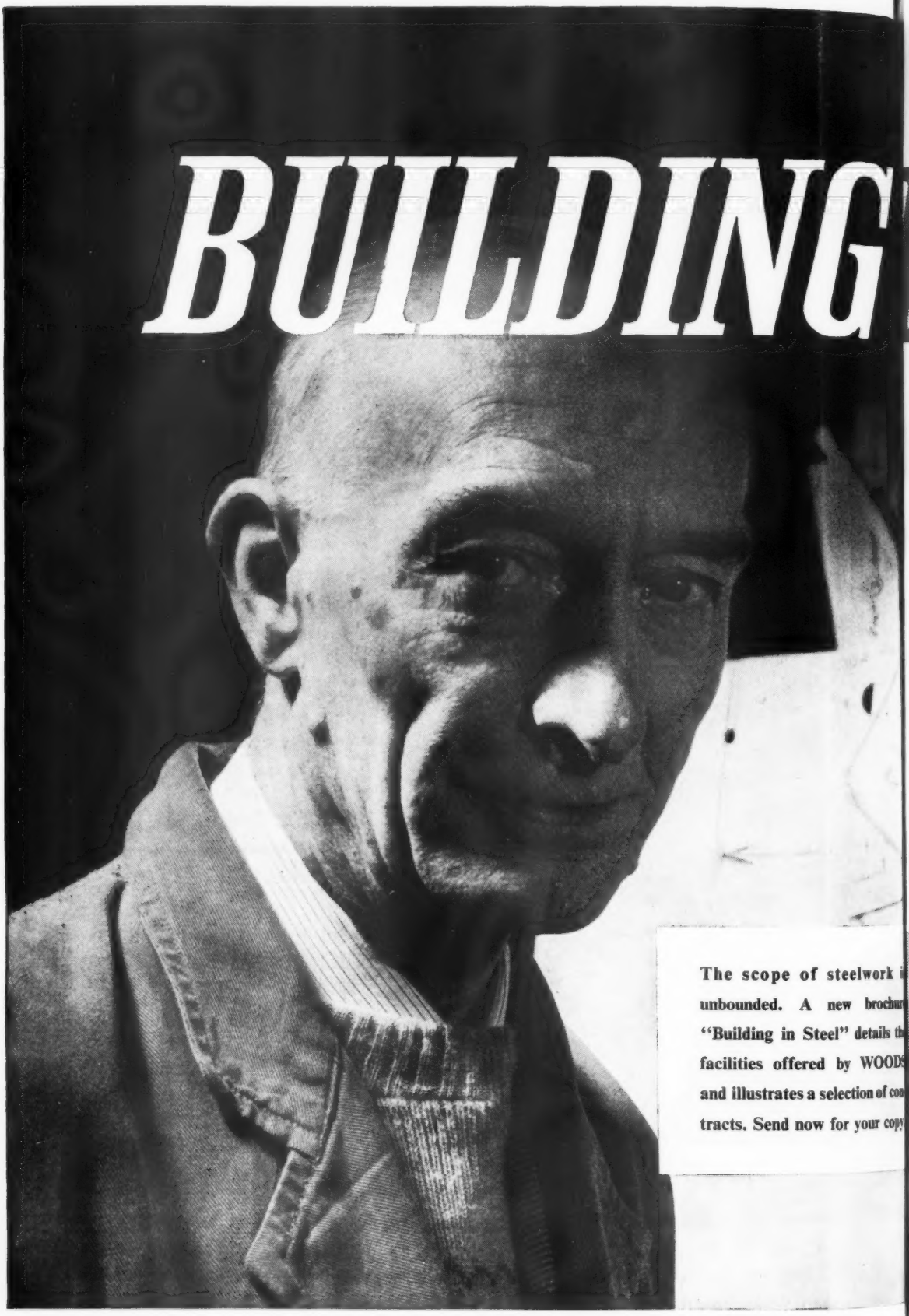

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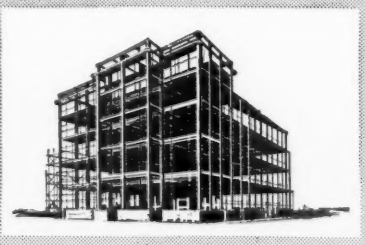

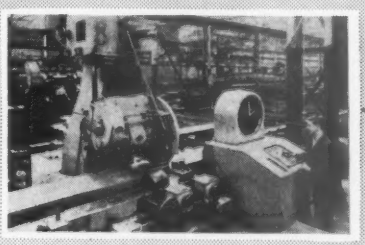

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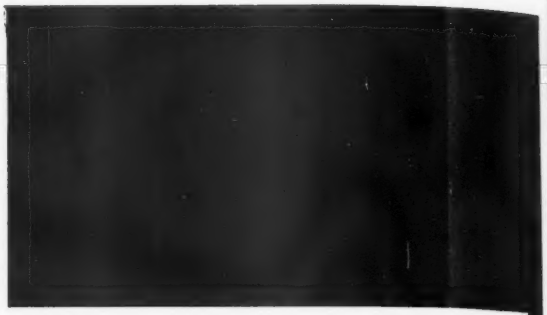

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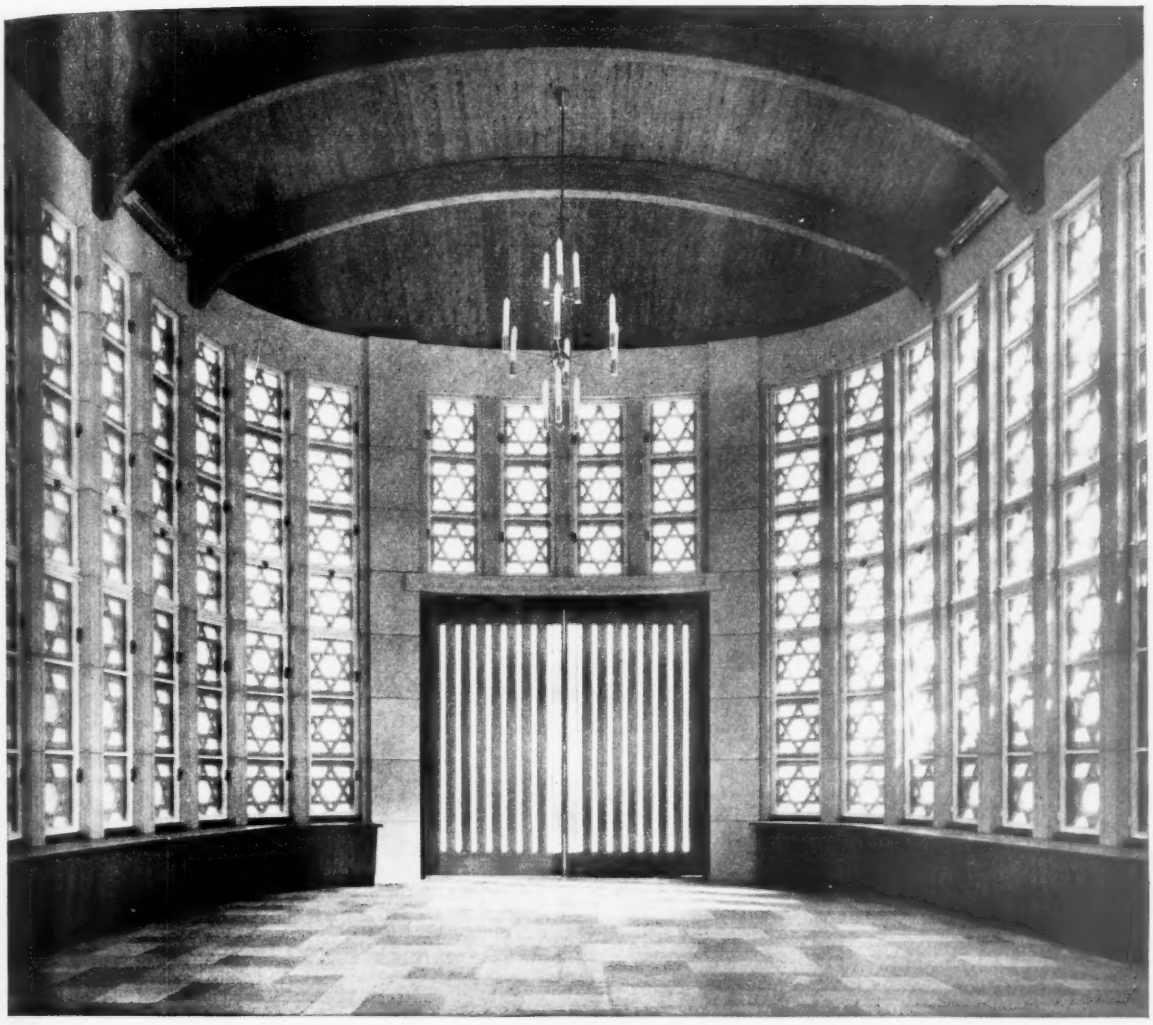

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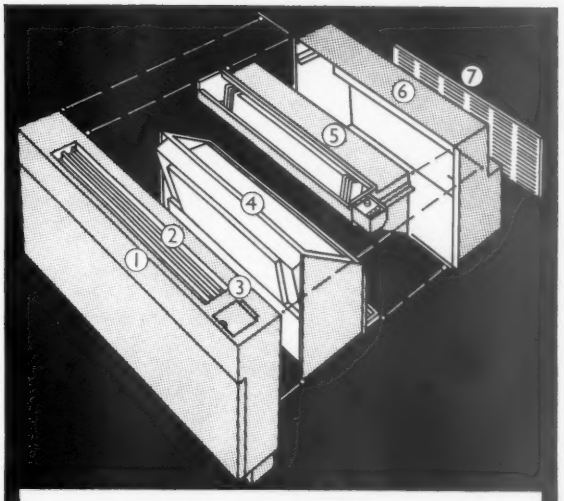

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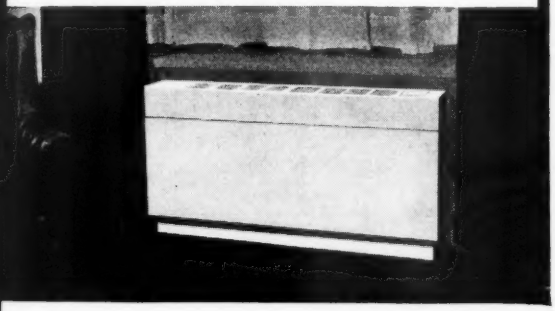

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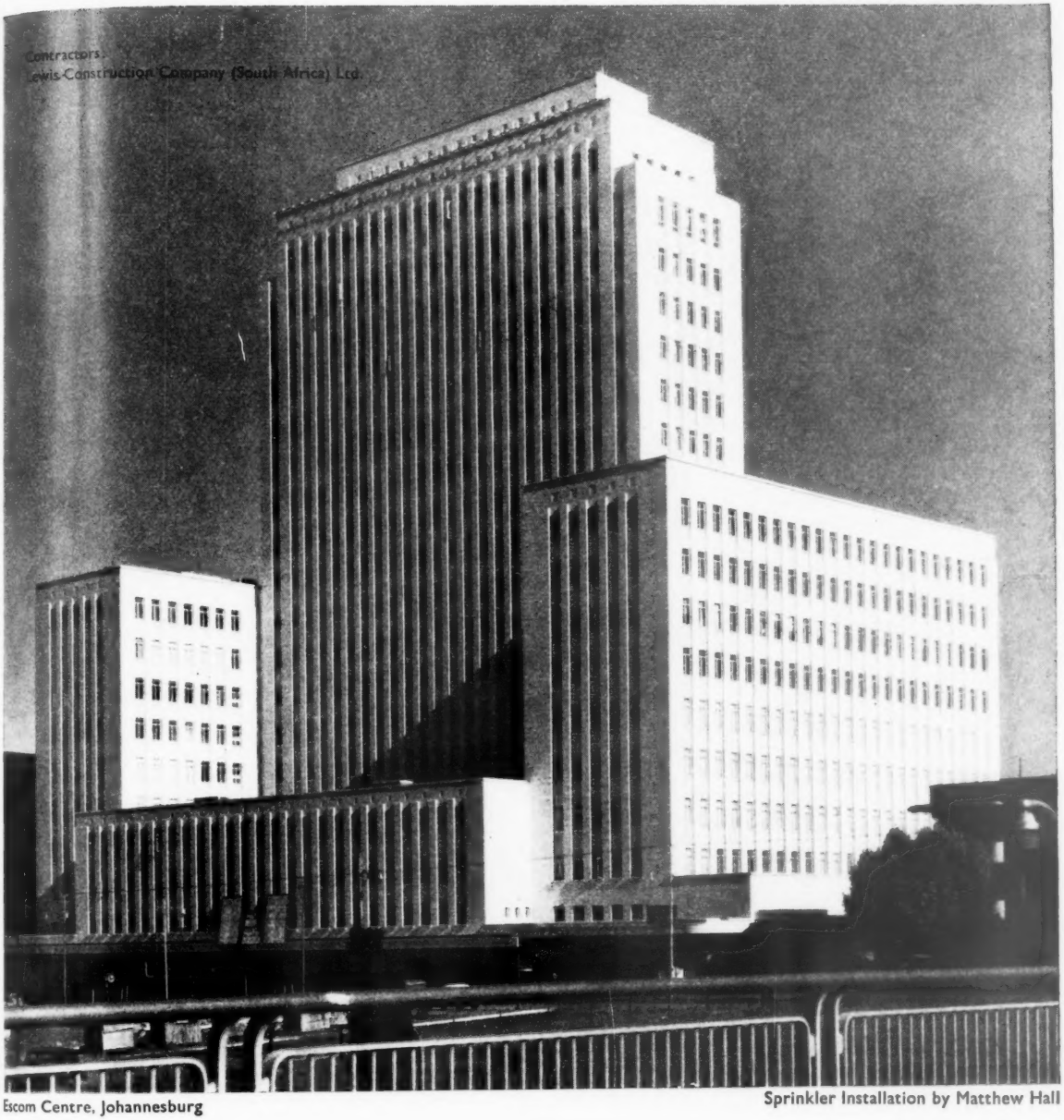

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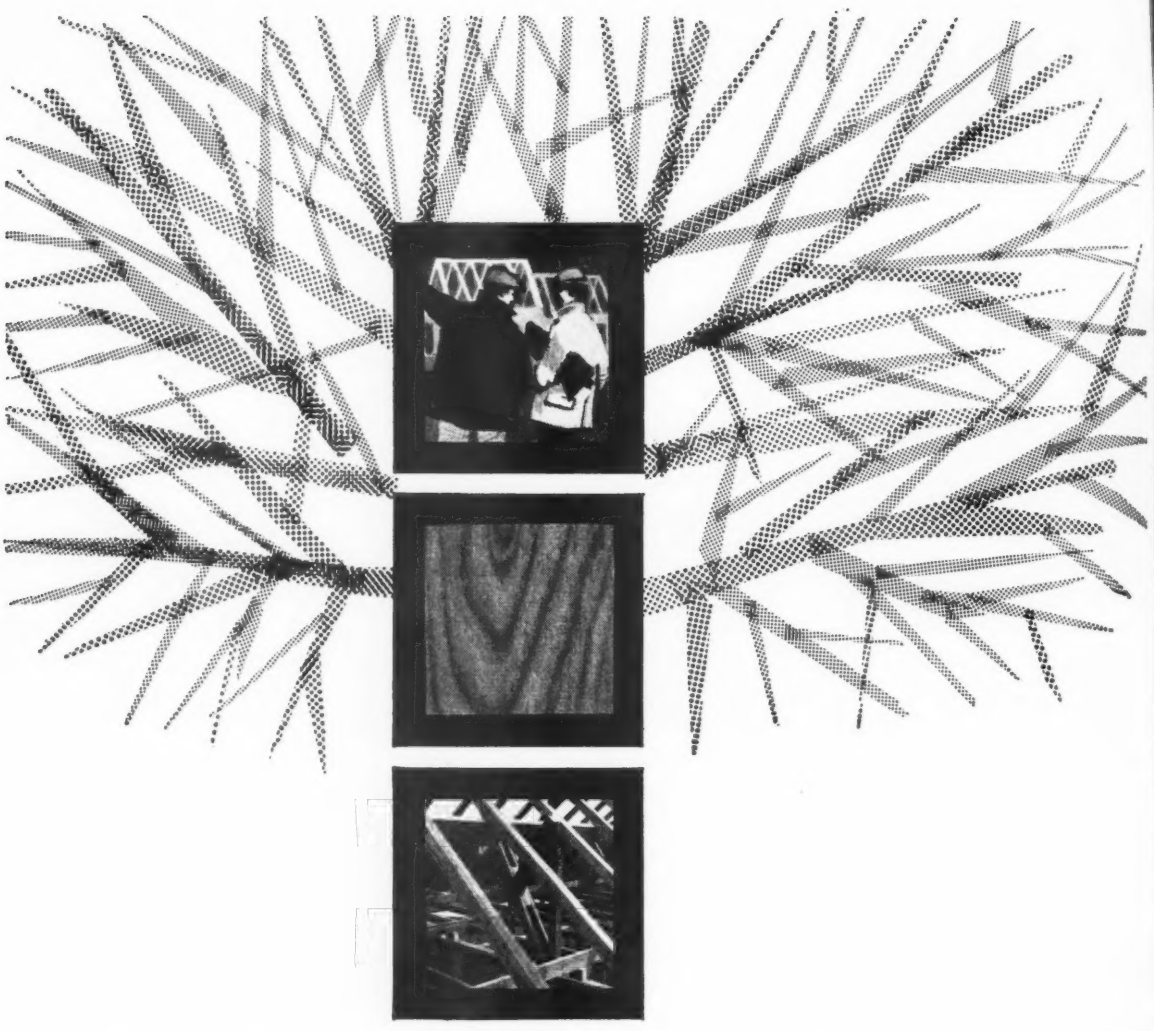

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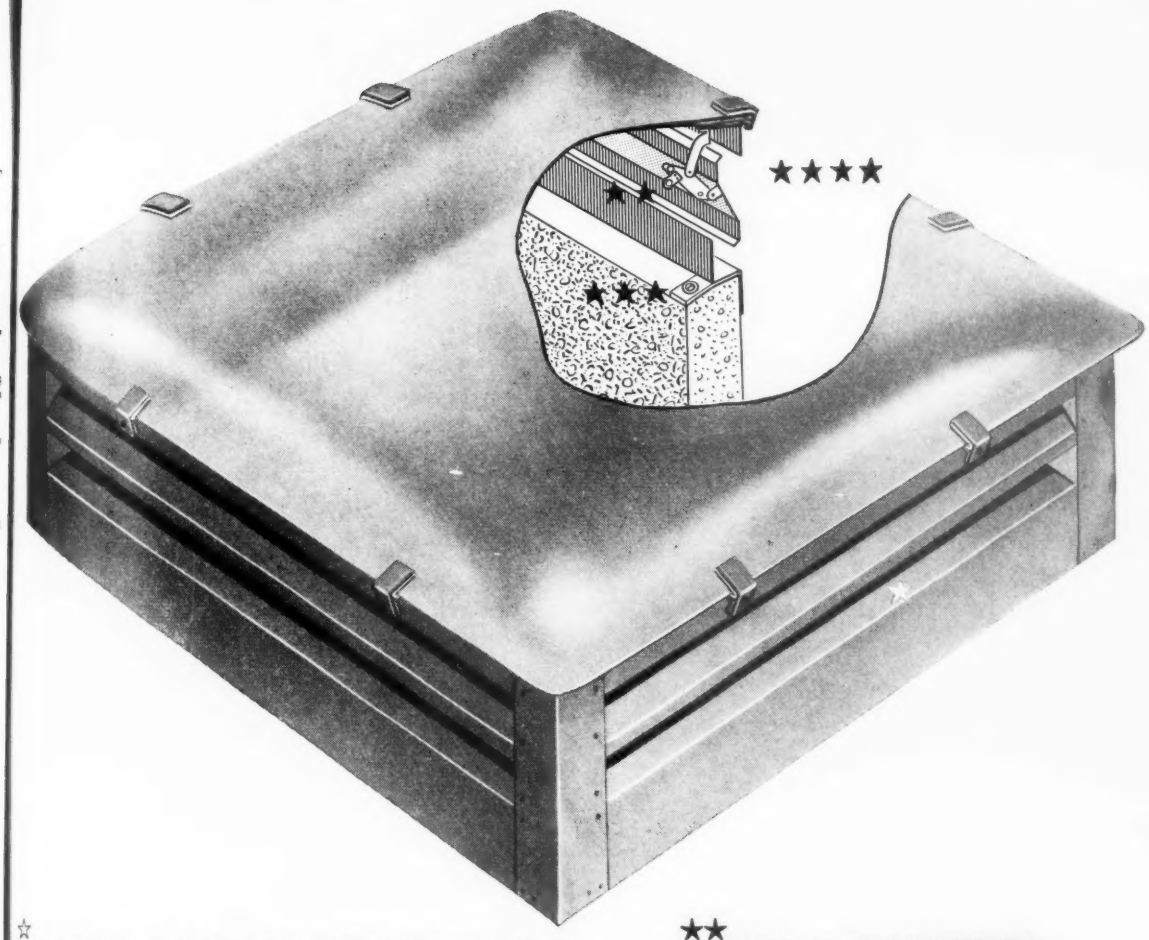

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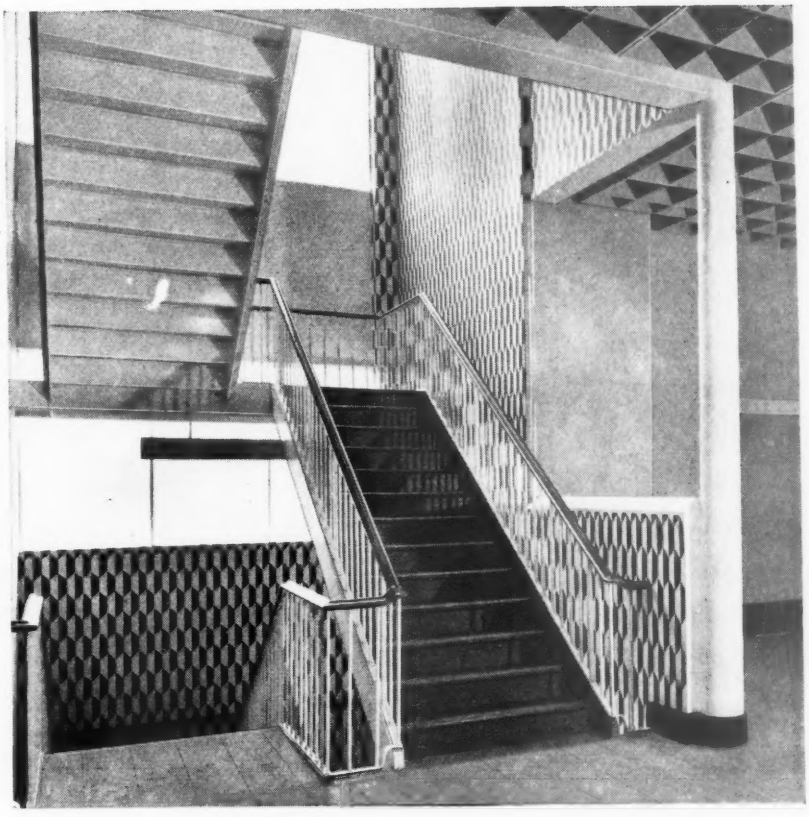

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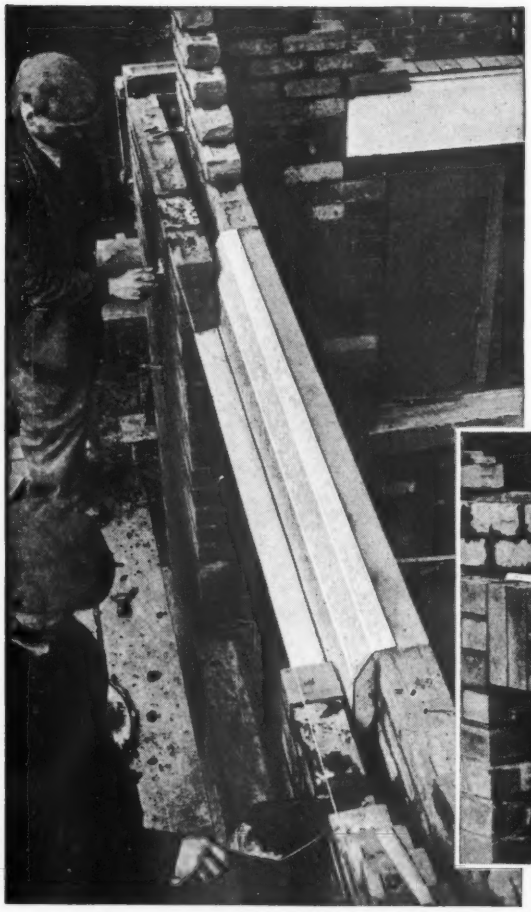
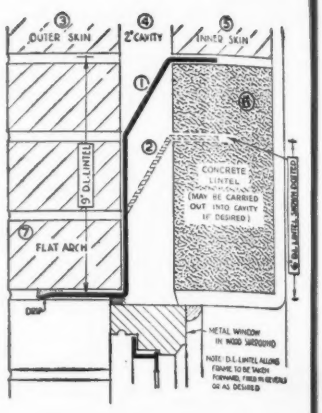


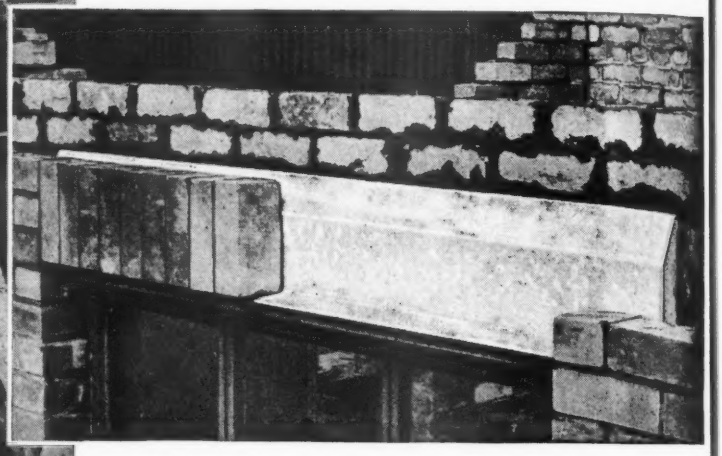
SECTION SHOWING TYPICAL DETAIL

(1) 9 in. Dorman Long Lintel
(2) 6 in. Dorman Long Lintel (shown dotted)
(3) Outer skin
(4) Cavity
(5) Inner skin
(6) Inside concrete lintel (carried out into cavity if so desired)
(7) Flat arch

The wide 'turn-in' of the Dorman Long Lintel allows the cavity to be varied from 2 in. to 2¾ in. in width.

Patent No. 694214





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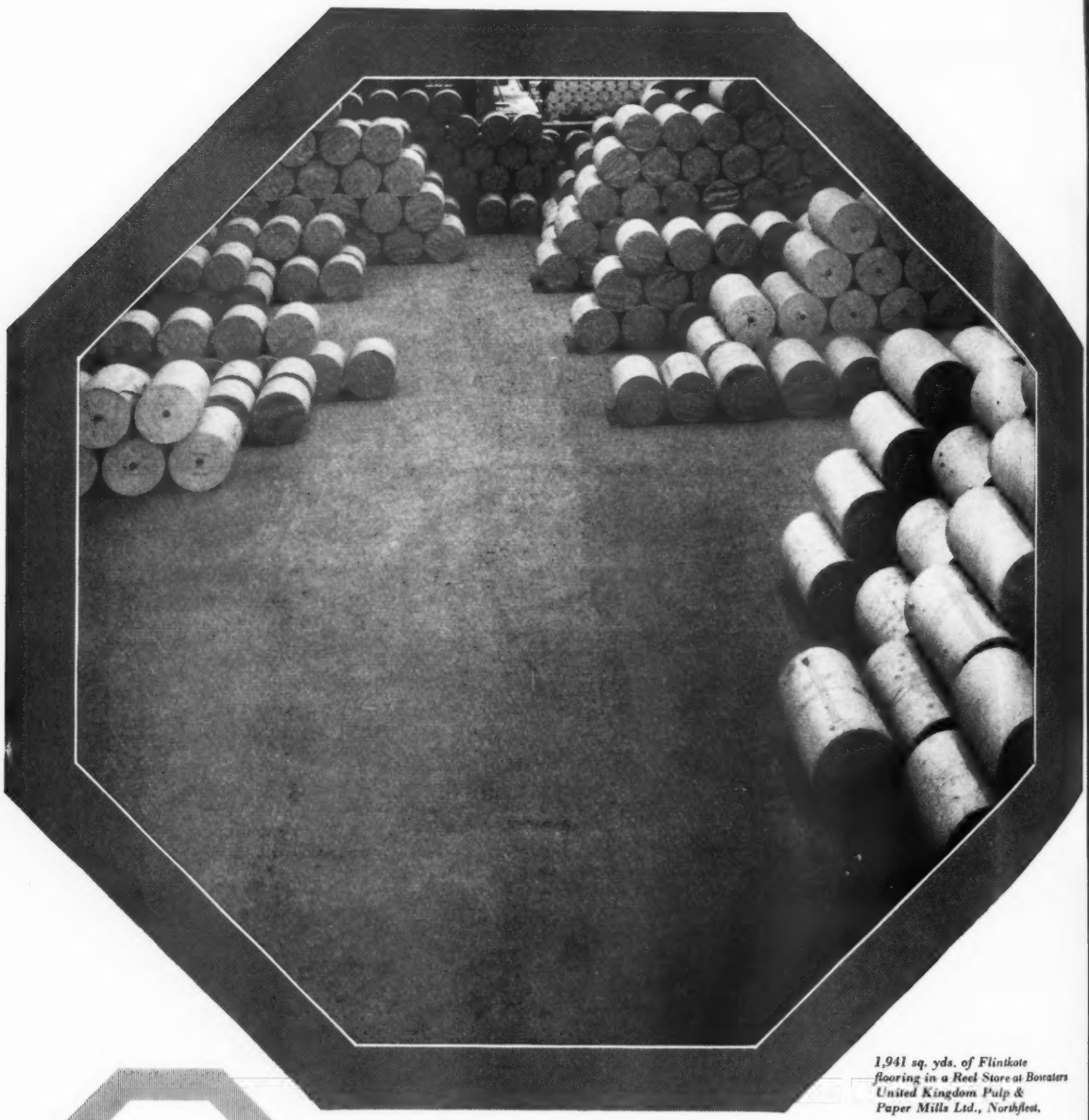

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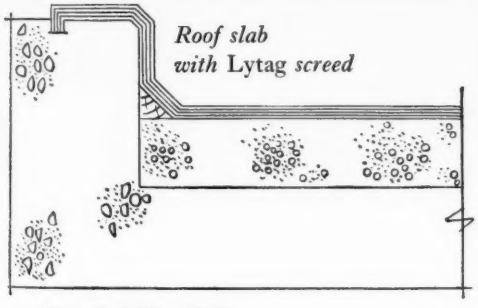

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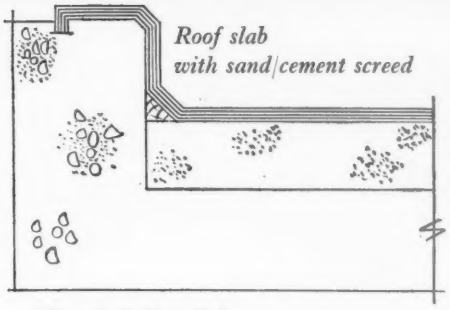

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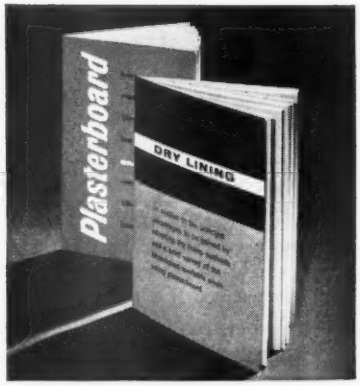

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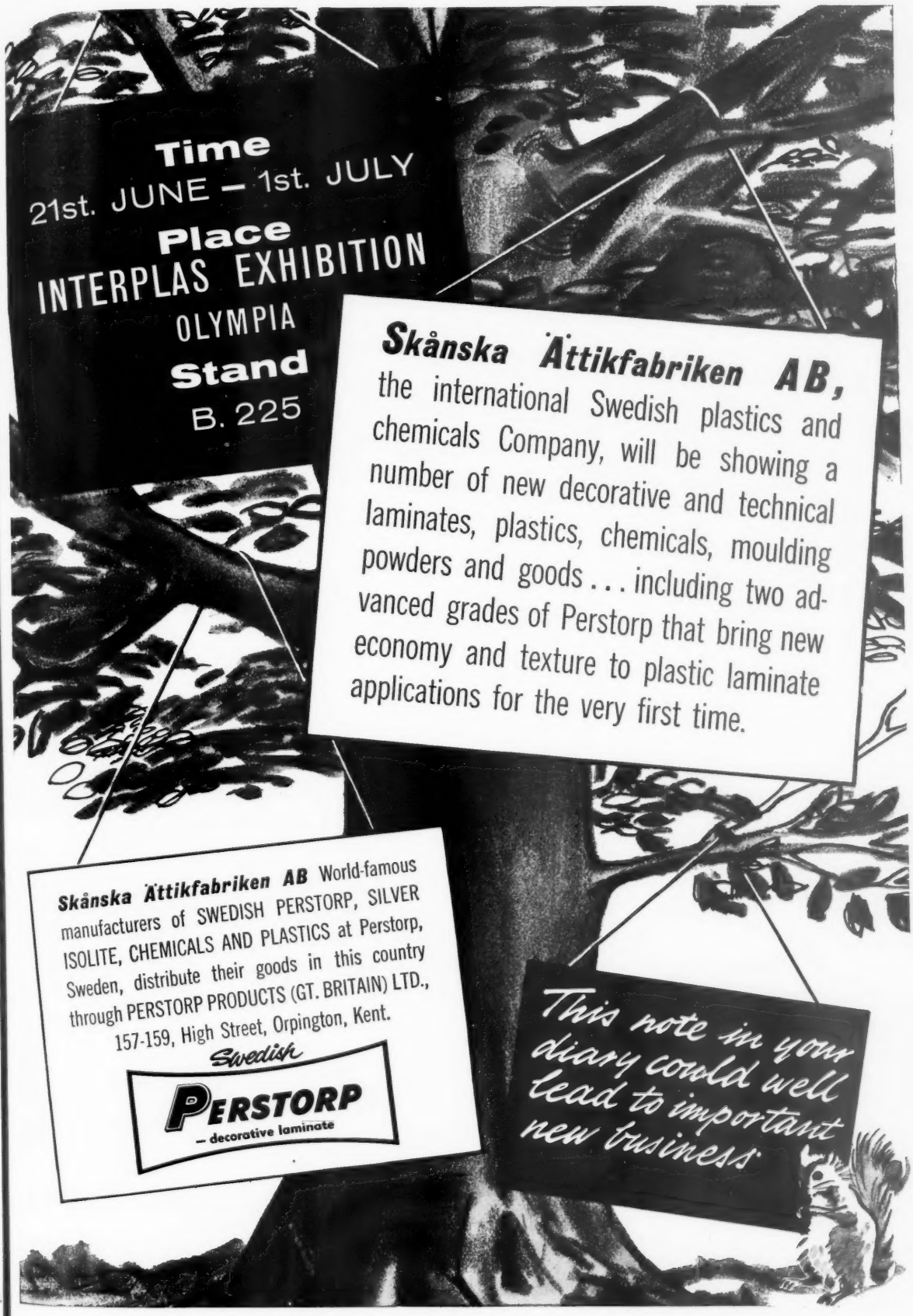
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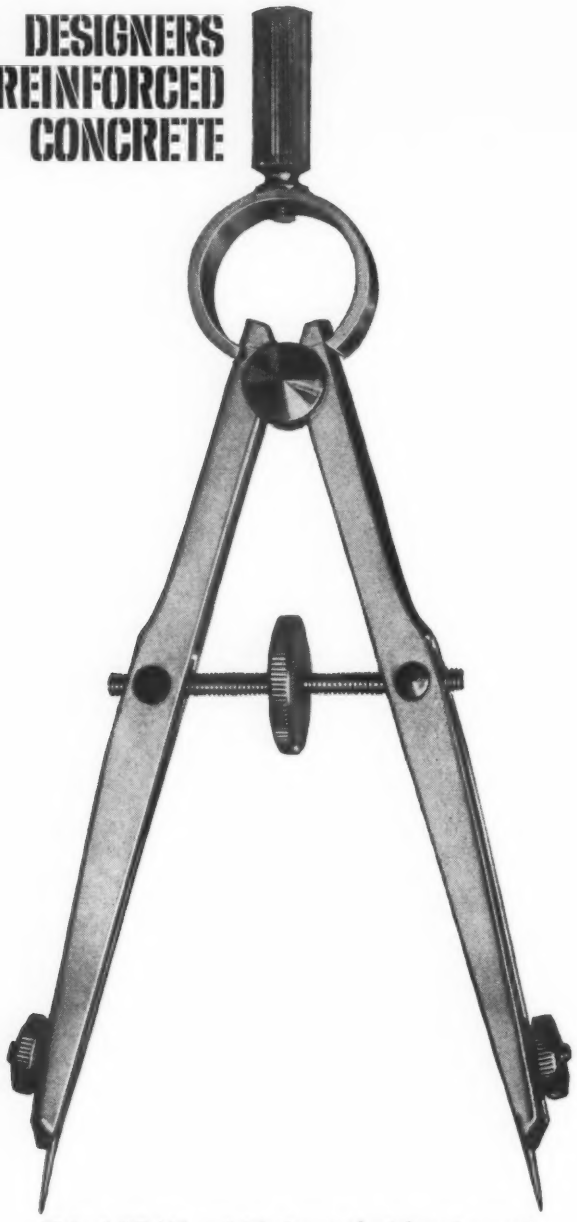

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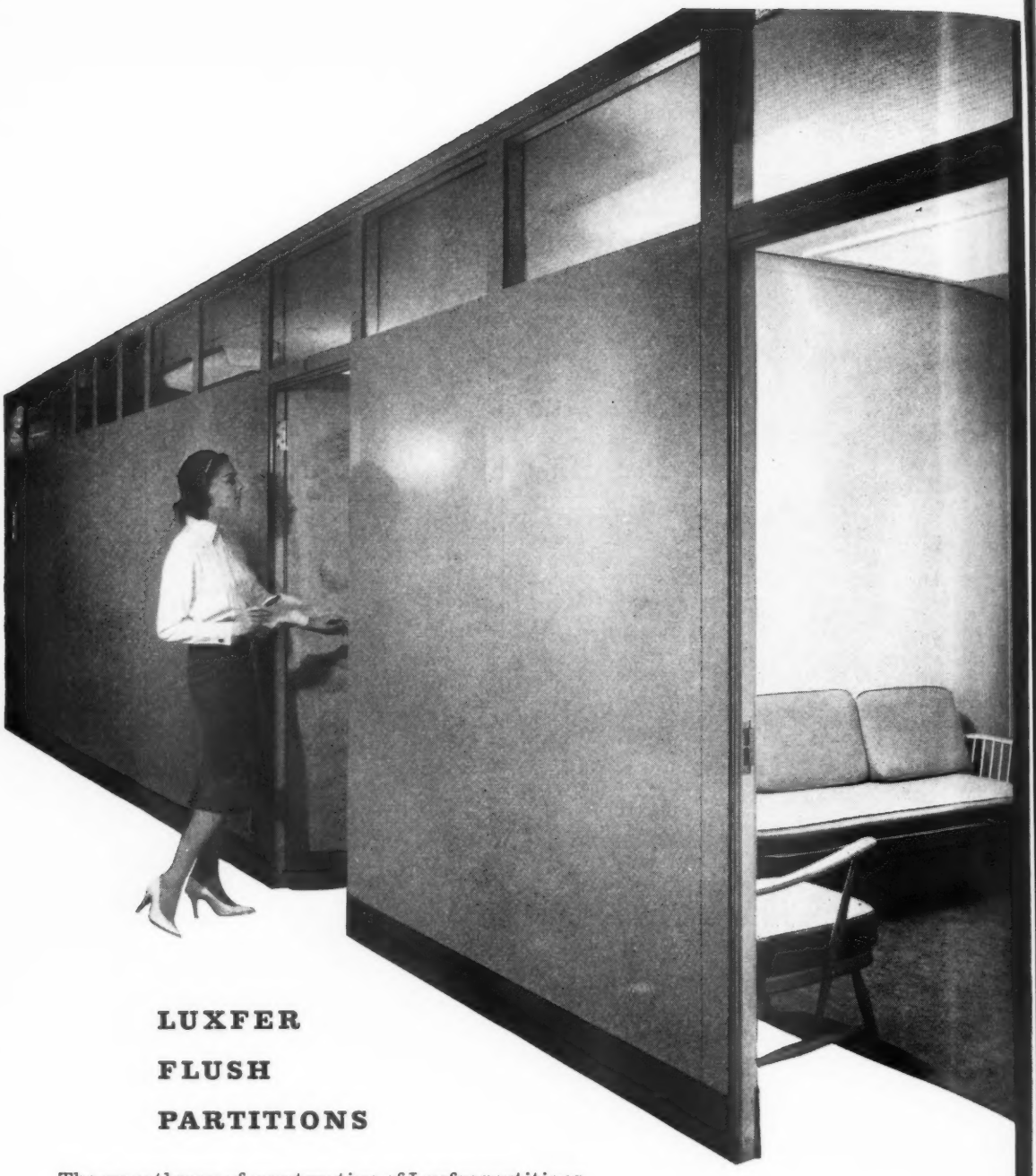

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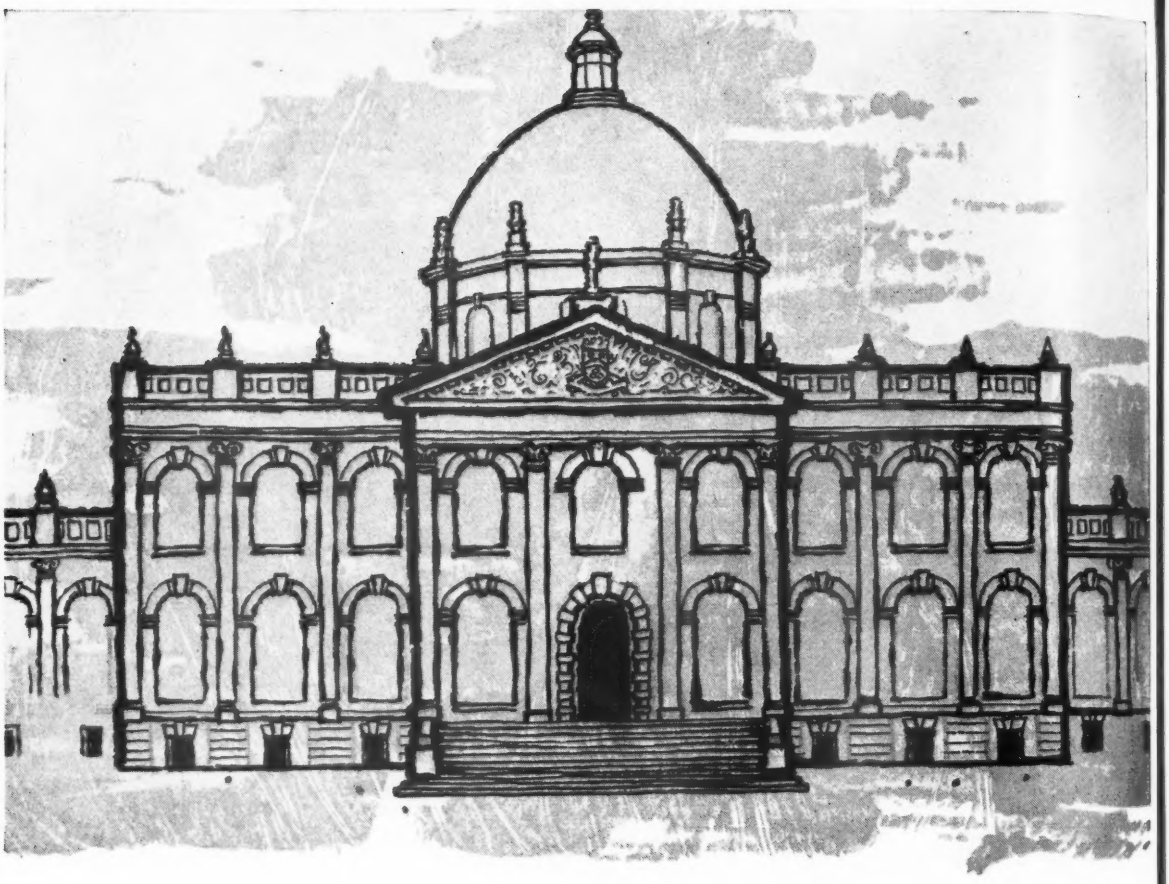

Sir John Vanbrugh—*the inspired amateur*

The career of Vanbrugh was as sensational and as unorthodox as that of Inigo Jones or of Wren. He was one of the nineteen children of a rich Flemish sugar-baker who had fled from Ghent to England as a Protestant refugee from religious persecution. John first appears in history in 1686, when he was commissioned in an infantry regiment. At his father's death, three years later, he inherited a fortune which enabled him to abandon his tedious duties in the "Army of Occupation" in Germany, and to settle down to enjoy life in London to the full. Arrested as a spy in Calais, however, in 1690, he was imprisoned successively at Calais, Vincennes, and the Bastille; but relieved his feelings by writing a play. Some critics consider that the grim architecture of Vincennes and the Bastille is reflected in certain of his own buildings later. Released in 1692, he returned to soldiering until 1702. Again, he varied the monotony of military life by writing plays, the nature of which may be inferred from their titles—*The Relapse, or Virtue in Danger*, 1696, and *The Provok'd Wife*, 1697. The risque nature of these comedies naturally made him very popular, and secured his admission to the famous and aristocratic Kit-Cat Club. Here he met the young Earl of Carlisle, who commissioned him completely without architectural training to design a vast mansion at Castle Howard in Yorkshire. As Swift wrote:—

"Van's genius, without thought or lecture
"Is hugely turned to architecture".

Huge the architecture certainly was, and "Van" may have toyed with the works of Palladio while in gaol, as an alternative to writing improper plays; but at any rate the end-product was the type of architecture we now call "Baroque". This tendency is still more apparent in the grandiose palace of Blenheim, which he designed a few years later for John Churchill, Duke of Marlborough, another member of the Kit-Cat Club. At Castle Howard, it is alleged that one can look through all the keyholes of the long succession of enormous state-apartments of the central block which extends through some 300 feet of the total frontage of 600 feet; but the wretched servants were stowed away in basement and attics, while the kitchens were isolated in a distant wing. At Blenheim, built at the national cost as a thank-offering to a national hero, pomp is appropriate; but the human aspect of the project centres in the long, bitter, and most amusing correspondence exchanged, over a span of twenty years, between Sarah Churchill (Marlborough's wife) and Vanbrugh. It was spiced with tireless malice on her side, with resentment and wit on his. Vanbrugh's huge practice included many other great mansions; also the Orangery at Kensington Palace and the King William Block at Greenwich Hospital. When he died, a contemporary wit suggested this epitaph for him:—

"Under this stone, Reader, survey
Dead Sir John Vanbrugh's house of clay.
Lie heavy on him, Earth for he
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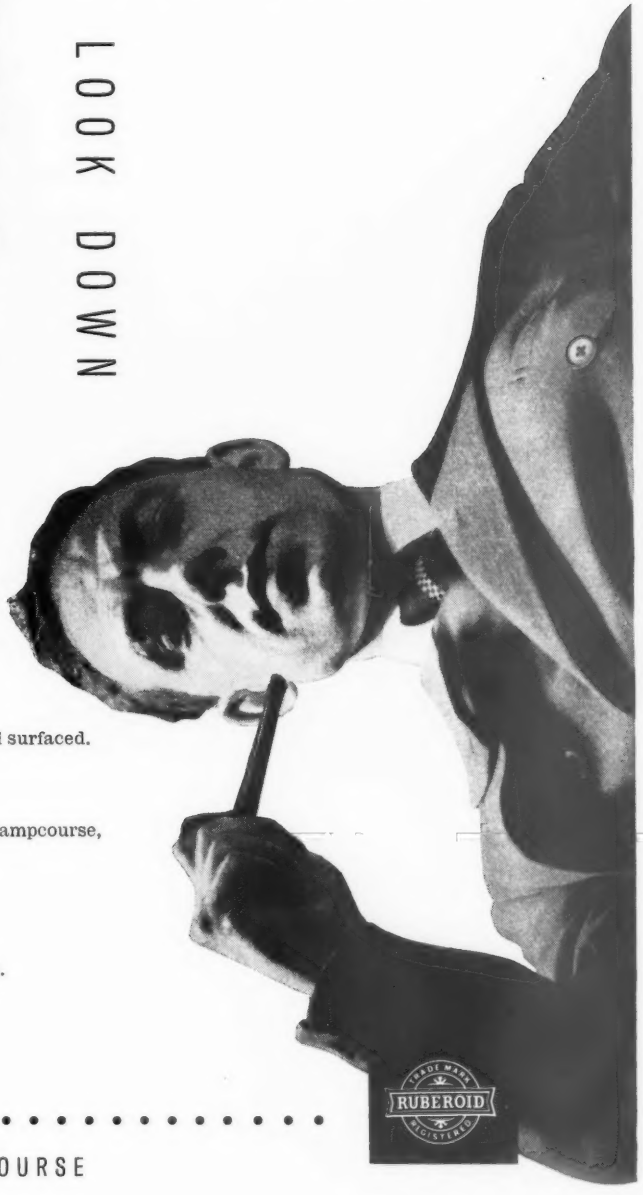

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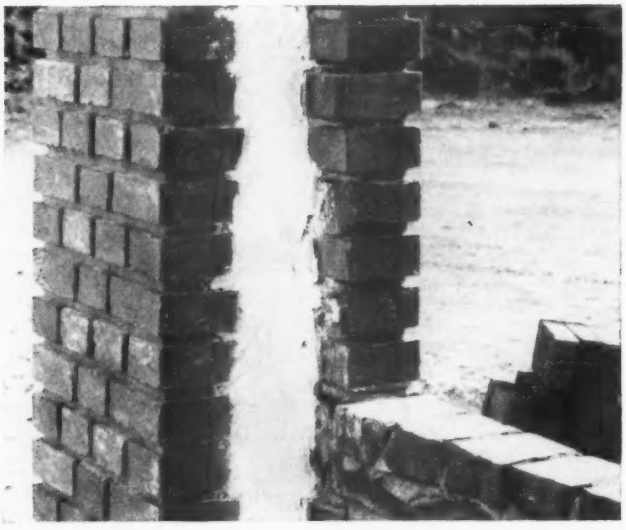

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TYPICAL METHODS

Fig. 1.
Shower cubicles.

Fig. 2.
Cross section through AA on Fig. 1.

Fig. 3.
Toilet cubicles.

Fig. 4.
Typical construction detail showing fixing to wall, make-up of partition, door arrangement, etc.

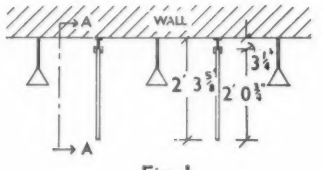

Fig. 1

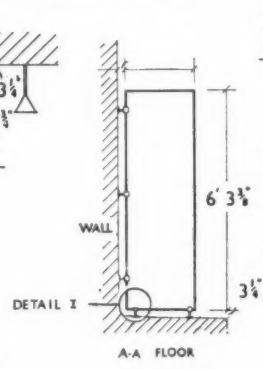

Fig. 2

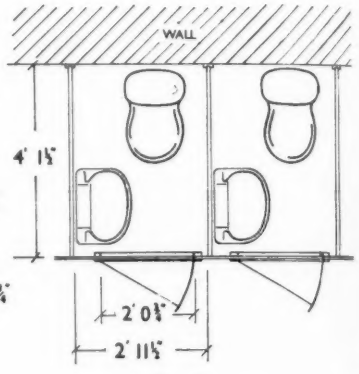

Fig. 3

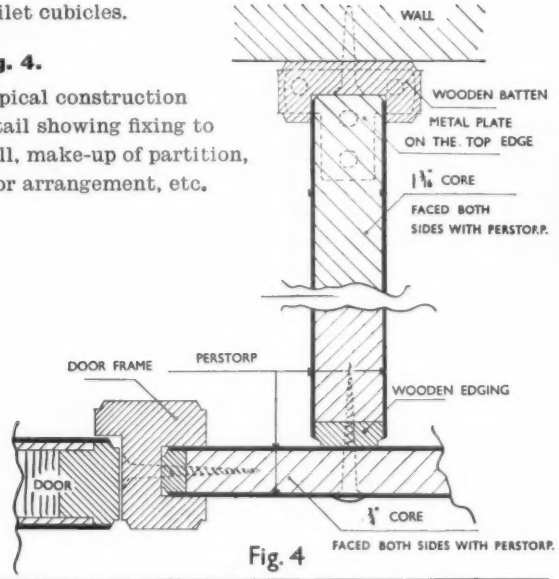

Fig. 4

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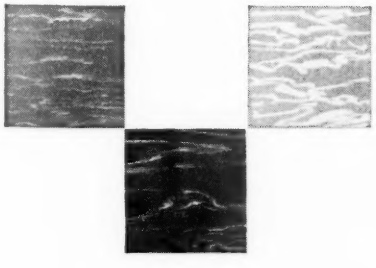

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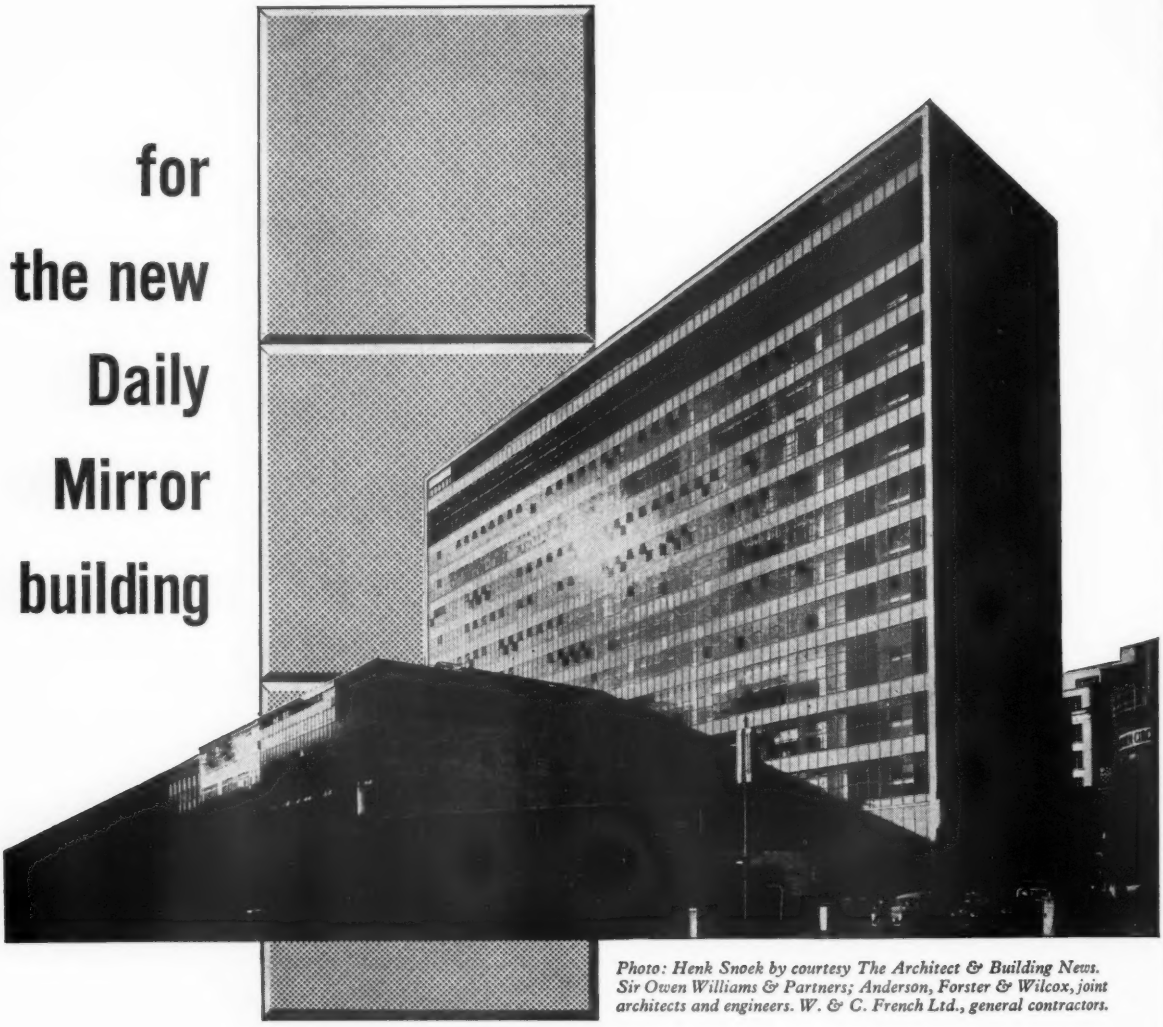

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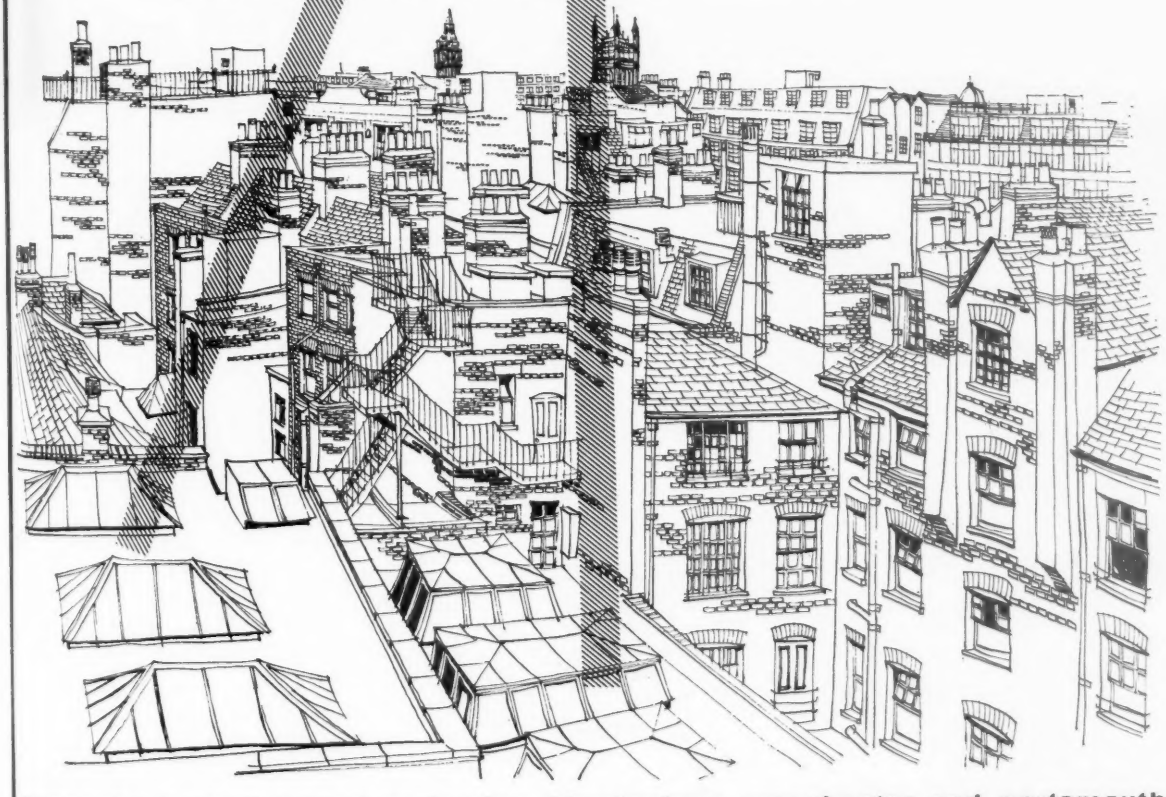

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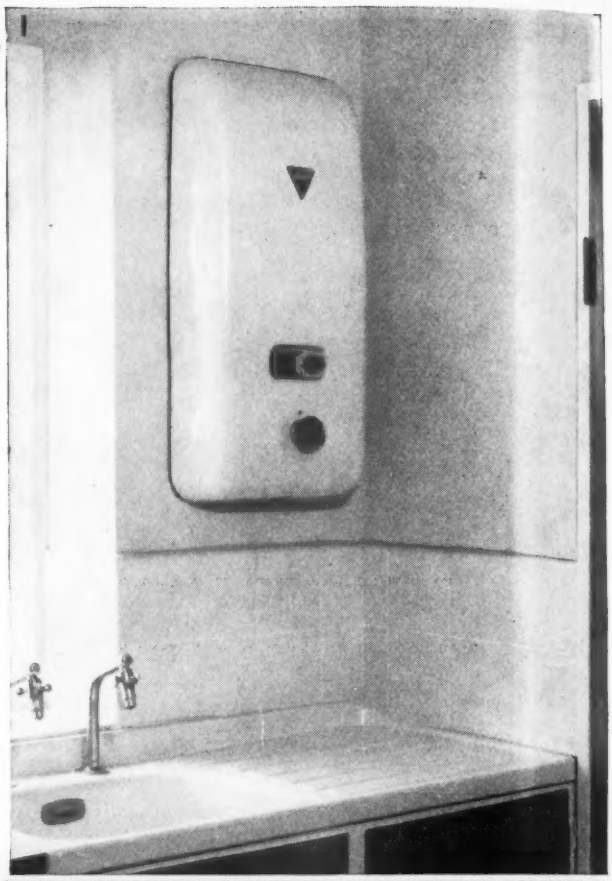

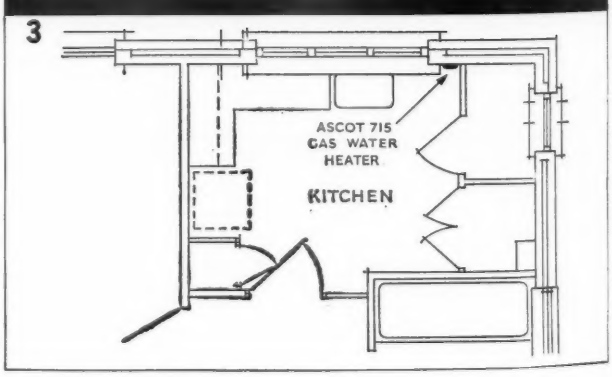

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Price 3*s* 6*d*

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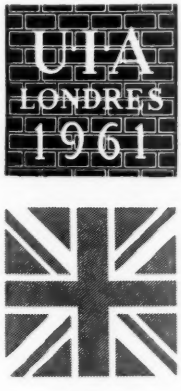
Diary of Events

15 June, 7 pm	Architects' Christian Union. Speaker: Mr C. Oliver Styles.
19 June, 6 pm	Library Group. Annual General Meeting.
27 June, 6 pm	General Meeting. Council Election Results. Presentation of 1960 London Architecture Bronze Medal. Presentation of Royal Gold Medal to Mr Lewis Mumford.
28 June to 29 July	Architecture Today Exhibition, at the Arts Council Galleries, 4 St James's Square, SW1. Mondays, Wednesdays, Fridays and Saturdays, 10 am to 6 pm, Tuesdays and Thursdays 10 am to 8 pm.
	IUA Congress
3 July, 11.30 am	IUA International Exhibitions will be formally inaugurated by the Chairman of the LCC, Mr Harold Shearman, MA, JP.
3 July, 2.15 pm	Opening of Plenary Session at the Royal Festival Hall.
7 July, 9 pm to 3 am	Gala Evening at the RIBA.



Cover picture

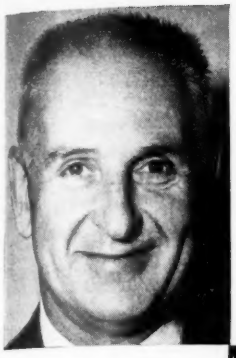
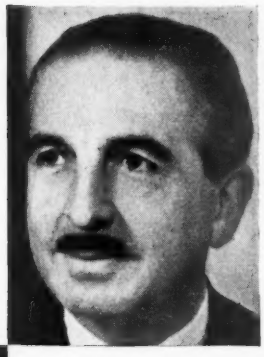
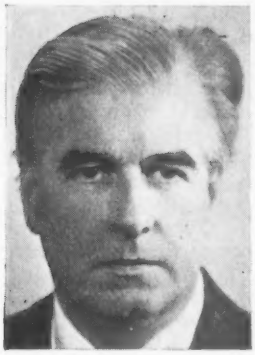
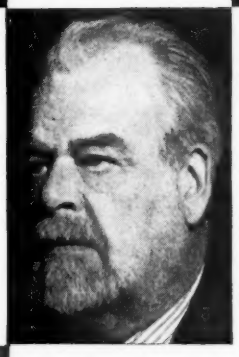
The two components of the cover design are shown above

Message of Welcome from Sir William Holford, PRIBA

The British have a reputation for being insular, but we hope to convince our friends from overseas who have come to London for the Sixth Congress of the International Union of Architects, that it gives us pleasure and delight to welcome them here, to entertain them as best we can, and to inform them of our contribution to the solution of the problems that we share. Architects have a special and a growing responsibility to master advanced technology, so that the vast resources of the modern world can be applied to the construction of a worthy environment for all man's activities. No one country can solve the problems of architecture and building on its own. We must learn from one another, and the great value of the IUA, and of the Sixth Congress in particular, is that it brings together architects from all over the world both to discuss the immediate questions on our agenda, and to form contacts and friendships that will endure in later years. We meet to strengthen international co-operation for constructive purposes in a sorely troubled world. In this issue of the RIBA JOURNAL we have tried to describe a small part of Britain's share in the development of new materials and techniques and their impact on architecture. We hope that, in the course of their visit, Members of the Congress will learn a great deal more that is of value to them, just as we certainly shall learn much from them. I wish them a fruitful and interesting stay in Britain, and hope that it will prove as enjoyable to them to be here as we know it will be to us to have them.

Message from Professor Yang Ting-Pao, Vice-President IUA
Vice-Director of the Nanking Institute of Technology

Personally I feel that the value of this Congress is manifold. It was in The Hague that I attended this kind of Congress for the first time and I attended the next one in Moscow. In both cases I enjoyed immensely the association with fellow architects from various parts of the world. As professional people, we find much of mutual interest. I made many friends and learned a great deal from them not only ideas of an architectural nature but also knowledge of the life and ways of other peoples. Travelling itself, especially for architects, is a liberal education. Each country may have its own geographical, political and economical peculiarities affecting its architecture and city planning. I was greatly interested when, during the IVth Congress in the Netherlands, I saw the reclamation works around the Zuider Zee where new housing areas and polder towns were being built and new prefabricated farm buildings were being put up. The Moscow Congress gave me a chance to study problems of city planning. Through the visits to various cities of the Soviet Union, I was greatly impressed by the rapidity and extent of their reconstruction and new development. At the same time it

Above, Centre: Señor Hector Mardones Restat (Chile), President IUA. Left: M. Pierre Vago (France), Secretary-General IUA. Right: Professor Robert Matthew, Vice-President IUA, Chairman of the Congress Organising Committee. Left: Professor Henry-Russell Hitchcock, Main Speaker 1; Professor P. L. Nervi, Main Speaker 2; Professor Yang Ting-Pao, Vice-President IUA, Chairman of Working Group B; Mr Arieh Sharon (Israel), Chairman of Working Group C.

gave me a chance to know more of the people and make many friends. To me both The Hague and the Moscow Congresses have been very beneficial and instructive.

My colleagues from China who had gone with me to these congresses felt much the same way. What they heard or saw on these trips had become useful reference later in their work, whether in practice of or in teaching architecture or city planning.

At this point, perhaps I may say a few words about what the architects are doing in China. Of course, building activities in the People's Republic of China is going on on a gigantic scale and with tremendous speed. The liberation of China in 1949 suddenly opened up an almost limitless field for the display of the architects' talent, opportunities totally inconceivable in the days of old China. During the past decade, hundreds of cities, thousands of county towns and numerous housing areas in the people's communes have been planned and built.

Now we are all looking forward with a great deal of interest to the coming London Congress. London, the site of our first Congress, certainly has enough attractions for us. It is a city that can boast a rich history with plenty of architectural monuments. In and around London we can find many interesting things to see. I have been twice in England, but the last time in 1945 was so long ago that I am quite anxious to visit London again.

We can readily understand the influence of political and social ideas on architecture and urbanism. We are mostly broad minded and progressive. So the IUA was formed to unite the architects of all countries in spite of their differences in political, economic and aesthetic boundaries to facilitate the free exchange of ideas between people of the architectural profession, irrespective of their nationality, race, professional training and architectural doctrines. This fraternal spirit may enable them to exchange their views and concepts, to profit by their mutual experiences, to broaden their knowledge and to enrich each other by their mutual differences. Thereby they may work better for the service of their own people by improving the physical environment of life in the reconstruction of old cities and the planning of new, and also in the raising of housing standards in a general way. Indeed, the IUA Congresses are more than mere social gatherings. They contribute to a better understanding of architects and people and hence toward the defence of peace and the progress of the human society.

I wish to express my thanks to our fellow architects in London who have been working hard in the preparation of the forthcoming Congress. May I take this opportunity also to wish them a great success.

The IUA Congress

By the time the July JOURNAL is out the Congress will be ending, so that this issue is in the nature of an appetiser.

Every full delegate from abroad will receive a copy, which will have in place of the eight-page section on buff paper short summaries of the main articles in the official Congress languages.

The note by Mr Alfred George arrived just too late for inclusion in the May issue for which it was written, so that it has been in many respects overtaken by events, but the tributes to those who have been working so long on the Congress preparations are even more deserved.

Progress Report by Mr Alfred George [*L*]

The last matter before Council on 11 April was to receive a report from Gontran Goulden, the Congress Director and Vice-Chairman outlining to the members the progress made so far. Before he came into the Council Chambers, the Chairman of the Organising Committee, Robert Matthew, paid glowing tribute to the incredible energy and effort Goulden has put into the organisation of the Congress and the superbly efficient and able manner with which he had overcome the innumerable problems and difficulties with which the Congress Staff were beset.

The following notes may be of interest:

To ensure the success of the Congress financially, it has been estimated that a minimum number of 1,700 registrations is required – at 1,500 the costs will more or less be covered. At the time of going to press the registrations numbered 1,367 and if the applications continue to be received at the present rate, the desired numbers will be achieved. A study of these matters shows that there is always a last minute rush to participate. Incidentally the previous highest enrolment at any Congress was 1,200 in Moscow in 1958.

Applications so far received have been from 52 countries. Apart from Great Britain (608) the largest registrations have been received from France (84), Spain (44), East Germany (11), West Germany (20), USA (80), USSR (24), and Mexico (101). The last named country has sent an intimation that a very much larger contingent can be expected and that the recruiting office in Mexico City is being besieged with applicants in true 'Latin' style. Perhaps a new meaning can be applied to the phrase 'Architectural Revolution'.

The Staff are having to cope with a number of odd requests from individual applicants; for example, one delegate has made a special request to find moorings for his yacht which he intends to sail up the Thames. This request has been met by arranging an excellent mooring at the South Bank Pier. Obviously the best position to be in to get the best seat at the Congress.

H R H Prince Philip, Duke of Edinburgh, will pay an informal visit to the Congress Working Groups during the morning of Thursday 6 July, and will also visit the Congress buildings and exhibitions. He has expressed a wish to be left free to mingle with the delegates at will, and to talk with as many people as possible during the visit.

No time was lost by Theo Crosby and his staff in completing the working drawings of the temporary buildings that will house the International Exhibition and the Congress Headquarters on the South Bank of the Thames, and work is now nearing completion. The architect is, for a change, in a very indisputable position to direct the contractors, Messrs Taylor Woodrow (who are carrying out the whole of the work free of any charge), that no extension of contract can be given in this case and that come what may, the contract must be completed by the 28 June 1961, when the press preview of the building and exhibition will be held.

Arrangements for all other official and social events and receptions are well in hand and special mention must be made of the Ladies' Committee who have prepared an exciting and extensive programme. The Grand Finale to the Congress will be the Gala Evening at the RIBA. This promises to be a gigantic 'beano' with dancing in the Henry Florence Hall and the sixth floor dining-room, starting at 9 pm and continuing until 3 am in the morning.

Most of the arrangements for the free excursions to places of architectural and historical interest have now been completed. These excursions will be open to all members and will take place in the afternoons of 4, 5 and 6 July. Visits will include places such as Greenwich Hospital and the Observatory, the Tower of London and the Alton Estate, Roehampton, amongst others.

The response to the appeal to extend private hospitality has been overwhelming and magnificent. Apart from the organised hospitality such as that proposed by the members of the Architectural Association, well over 1,100 offers of hospitality have been received from London architects.

The Post Congress tours arrangements are now practically complete. Allied Societies and New Town organisations have been very forthcoming and helpful in their assistance and advice and the stage is set in most of the villages, towns and cities where the tourists will visit. The travel agents have completed most of their bookings, which include accommodation in some of the best hotels that we have in the country. Three of the tours, for example, will go to the Lygon Arms, Broadway, where excellent room service and cuisine is being offered. Bookings have also been made for a large number of visitors to go to the Shakespeare Memorial Theatre for a performance of *Hamlet*. Other places of interest, picked at random from a great many, where hospitality will be given and where the local architects will act as hosts, are new towns at Harlow, Crawley, Stevenage and Cumbernauld, the Nuclear Power Station at Berkeley, the new gigantic plant of the Steel Company of Wales, a CLASP school in Coventry, and the town centre developments there, the Colleges of Oxford and Cambridge and Clough Williams-Ellis's beautiful Portmeirion.

Malcolm MacEwen's publicity efforts have been crowned with success in as much as *The Times* is proposing to publish a special Architectural Supplement during the week of the Congress and *The Guardian* is considering a similar publication. Both the BBC and ITV have promised to consider 'covering' the Congress and possibly introduce feature items both on sound and television.

Efforts have been made to organise a 'squad' of scooter owners to number about 15 or so for operational duties, such as carrying messages, during the Congress Week, but so far this recruiting effort has failed rather badly, since not a single enthusiast has been found. We hope that the architectural schools still contain a large number of mechanised students who will volunteer for this very essential work and enjoy helping with the Congress.

Special and grateful thanks are due to the Cement and Concrete Association who have undertaken to produce nearly the whole of the Congress printing, consisting of papers, a large variety of tickets, programmes, invitations, brochures, leaflets, etc., free of any charge, and who in addition are giving a Garden Party at Wexham Springs, Slough, for Members and Associates in the evening of the 6 July.

I would like to add a tribute to the very hard working and efficient staff who occupy the 'dungeon' offices in the basement, so capably converted into slick and modern offices with inter-communicating rooms, by Anthony Williams. Here the Congress Adviser, Miss P. (Robin) Cridland has the immediate and undivided assistance of David Taylor the Congress Secretary, and the Social Secretary Diana Mead. Mention should also be made of the small team of indispensable young ladies without whose efforts no office can be a success, Doris Craig, Lorna Woodgate, Diana Creswell, Veronica Stafford and Susan Temple.

Council Business

The Council met on 9 May with the President, Sir William Holford, in the Chair.

Secretary's Report

The Secretary began his report by referring to the election of the President and Mr Frederick Gibberd, Vice-President, as Associates of the Royal Academy. There was warm applause.

New RIBA Standard Form of Architects Certificate. The Secretary announced that the new certificate pads for chartered and non-chartered architects, produced by the Technical Information Service on behalf of the Practice Committee, were now available at 27*s.* 6*d.* each, and a copy was handed round.

Each pad consists of 100 certificate forms in triplicate to A4 size. The certificate form comprises the direction to the main contractor to pay nominated sub-contractors, the certificate itself, a copy of the direction for the use of the quantity surveyor, the notification to the building owner, and a copy of the direction and certificate for the architect's file. The flap of the cover is set out so that it may be used as a record of all certificates issued from the pad and can subsequently be detached and filed. Instructions on how to use the pad are printed on the back of the front cover and a specimen set of filled in forms is included at the top of the pad as an example of how they should be completed. Facilities are available for architects to have their names and addresses overprinted on the forms if they should wish.

In designing the new pad it has been attempted to provide architects with a tool adequate to their present needs and to ensure that its use is made as rational as possible through the application of a logical typographic layout which gives the maximum legibility and demands the minimum of clerical effort. It is hoped that the design of the new pad will overcome the factors which in the past have often made the completion of legal forms a burden.

RIBA Office Survey. The Secretary said that the Survey Team have now virtually completed their visits to architects' offices, and are moving on to the stage of analysing the mass of data collected about office costs, productivity, staffing and organisation from over 60 offices visited. This careful analysis of factual information, substantiated by fairly detailed impressions of the standard of service given by offices, will form the basis for the Team's report. He said it was hoped that the report would be available for circulation to Council members towards the end of August, for consideration at the Council meeting in early October.

In outline, the report will probably take the following form:

(*a*) Introduction—Terms of reference.
Method of working:
(i) Visits.
(ii) Postal inquiry.
(*b*) Summary of conclusions and recommendations.
(*c*) Factual description of architectural practice today.
General economic structure of the profession:
Types of offices; Size of offices; Numbers and kinds of staff employed.
Work that has to be done in an architect's office.
The offices surveyed:
(i) Type of building work.
(ii) Kinds of staff employed, turnover and demand for staff.
(iii) Salaries paid.
(iv) Profitability (and productivity) of offices.
(v) Management efficiency.
(vi) Technical efficiency.
(vii) Quality of design.
(*d*) Significance of the team's findings in relation to the terms of reference.
Staffing of offices:
(i) Education and training of Architects.
(ii) Non-architectural skills needed at various stages within and outside the office.
Remuneration:
(i) Review of RIBA of Fees } Making comparisons with
(ii) Level of salaries } other professions.
Standard of service:
(i) To the client.
(ii) To the nation.
(*e*) The future of architectural practice (looking ahead 10 or 20 years).
Appendices—mainly statistical.

Architects in Jersey. A number of RIBA members in Jersey have joined together to form an Association of Jersey Architects, under the Presidency of Mr R. A. N. Biggar [*A*]. There are some 27 members and retired members in Jersey.

Architects in Malaya. News has been received of an amalgamation of the Institute of Architects of Malaya and the Society of Malayan Architects under the title, The Singapore Institute of Architects. This would seem to be a satisfactory outcome of the efforts which have been made over the past three years to resolve difficulties over representation of the professions in Singapore. Subject to RIBA approval of the Institute's rules, the way will then be clear for its admission to alliance.

London Architecture Bronze Medal

The Jury entrusted with the award of the London Architecture Bronze Medal for the year ended 31 December 1960 have made their award in favour of luxury flats at 26 St James's Place, SW1, built to the design of Denys Lasdun and Partners (Mr Denys Lasdun, MBE [*F*], and Mr Alexander Redhouse [*A*]); General Contractor: J. Jarvis and Sons Ltd.

Admission to Alliance

The Council gave approval to the admission as an Allied Society of the North Wales Society of Architects.

Council Elections—Have you voted yet?

Members are reminded that the voting papers for the election of the Council for the session 1961–62 must be returned by 20 June.

Last year only 3,916 members voted out of a possible 15,562, or ONE Member in every FOUR, a smaller proportion than in any post-war year. The number of votes received by successful candidates ranged from 1,539 to 1,142, representing less than one-tenth of the electorate.

In previous years, the average proportion voting has been about 33 per cent, or one member in three. In 1952, a peak of 40 per cent voted. This was a year when the profession was in the doldrums, with many architects unemployed. Today there is full employment – but there are many other equally vital problems which will face the next session's Council. It is therefore very much in a member's own interest to take his share of responsibility for choosing the members who will represent him on the Council.

A post-election analysis of envelopes in which voting papers were returned in 1960 showed that Fellows had the best voting record – 37 per cent of Fellows voted, compared with 25 per cent of Associates and 15 per cent of Licentiates. Proportionately fewer members in Scotland and Wales voted than did members in England. A very rough analysis by age showed that Associates between 45 and 65 had a better voting record than those under 45. Apart from this broad trend, lack of interest in voting appeared to be spread fairly uniformly over all age groups.

RIBA Topics

National Joint Consultative Committee of Architects, Quantity Surveyors and Builders

The 5th Annual Conference of Regional Joint Consultative Chairmen and Secretaries was held at the RIBA on 3 May; Mr George Grosvenor, CBE, was in the Chair. The Conference was attended by representatives from all the regional consultative committees, together with members of the National Joint Consultative Committee.

Economic Situation. A very full discussion of the present state of the building industry took place. All regions reported a very heavy load of new work which showed no signs of slackening. This was leading in most areas to labour shortages, especially of craftsmen. The large number of major projects – power stations, motor ways, major industrial developments – were, in many areas, delaying progress on small and medium size projects. Although it was realised that building was essentially a service industry and must accommodate itself to rapid changes in demand without reliance on any artificial control of the volume of work, several delegates expressed the view that the Government should have regard to the effect on local resources of men and materials when scheduling the start of major works. The Conference recommended that the National Joint Consultative Committee should attempt to take stock of the building industry's position in the national economy and the future capacity likely to be required.

Projects of Exceptional Urgency. The need for specific advice to the industry from the National Joint Consultative Committee on how urgent projects should be handled was one of the main topics of discussion. Orthodox procedures were often inappropriate when a client, usually for good economic reasons, wanted a job built very quickly. The industry used many different unorthodox procedures to satisfy such clients, but they were not always successful. A rationalisation of procedures, and in particular some means of combining the speed that results from negotiating a contract with an element of competition, was needed. The Conference endorsed the proposal that the National Joint Consultative Committee should examine this problem.

Joint Training. Lively discussion also occurred on the report from the Eastern Region of a Conference on Joint Training and the news that the National Joint Consultative Committee had been advised by its officials to establish a representative committee under an independent chairman to make proposals for joint training before qualification.

The meeting closed with a very warm vote of thanks to Mr George Grosvenor for his conduct of all five of the Regional Joint Consultative Committee Conferences which have been held. Mr Grosvenor will relinquish the National Joint Consultative Committee Chair in October next and this Conference is therefore his last as Chairman.

'Yerb'

The President of the Building Centre, Sir Basil Spence, PPRIBA, has announced that Mr F. R. Yerbury [*Hon. A*] will, at his own request, relinquish his position as Director of The Building Centre at the end of 1961.

Mr Yerbury, who will still be associated with the activities of The Building Centre, was one of its founders in 1931 and its first Director.

From 1 January 1962 the Centre will be under the management of two Joint Directors – Mr Gontran Goulden [*F*] and Mr Robert Nott (Financial Director).

One of the happiest get-togethers of the year is unquestionably the annual Building Centre lunch at Claridges. This year all those present had the same thought in mind, that it was Frank Yerbury's last year as Director. Everyone knew that sooner or later this jovial and indestructible man would have to ease up a little, but even so, it is very hard to take in, for as Sir Basil said in his brief speech, 'Frank Yerbury *is* the Building Centre'.

The new President of the A A

The New AA President

Mr J. M. Austin-Smith, MC, TD, AADIPL. [*F*], has been elected President of the Architectural Association for its 115th session, which commenced on 1 June.

Mr Austin-Smith has served the RIBA in many capacities. A lively and energetic member of various committees over the years, he is Hon. Secretary of both the Practice Committee and the Management Committee, and is one of the Institute's two Hon. Auditors as well as being a member of ARCUK Council. He has lectured on management subjects at the RIBA Cost Control Conferences, and has taken a leading part in the organisation of the advanced management course at York and at the AA. Since October 1960 he has been a member of the RIBA Office Survey Team. He is in private practice. Mr Austin-Smith commanded the Gunner Regiment, HAC 1956–60. He is also interested in gardening and sailing.

Warts and All

Addicts of *Time* magazine are familiar with the not-infrequent illustrated articles on modern architecture. This is not surprising as the *Architectural Forum* comes from the same publishing house. Many members must have bought the 5 May issue on seeing Le Corbusier's portrait on the cover – that unmistakable face of a poet with an old boxer's nose. The equivalent distinction in this country would, we suppose, be inclusion in Madame Tussaud's exhibition. The cover story, well illustrated in colour, was a brilliant example of the magazine's editing – back-room research translated into snappy readability, and millions of laymen to whom Corb had been a name only must now see him as one of the great figures of his age. Both Corb himself and *Time* received honours from the American Institute of Architects. The gold medal of the AIA for the Master, and a citation to the magazine 'for the continuing interest displayed in architecture, both in its stories and its illustrations'.

Royal Academy School of Architecture

The Council of the Royal Academy intend to open an evening Studio of Architecture in October, 1961. This Studio will be associated with the existing day Schools of Painting and Sculpture. Only a limited number of senior students (qualified or partly qualified) can be considered. No fees will be charged and attendance will be voluntary. Students will work on subjects of their own choice, with discussion and criticism by a panel of visitors, both Members of the Royal Academy and others. Enrolment forms are obtainable from the Secretary, The Royal Academy of Arts, Piccadilly, London, W1. Applicants may be asked to submit examples of past work and to attend for interview.

Seventeenth Report of the Royal Fine Art Commission

The Report of the RFAC for 1959–60 goes beyond the usual record of cases submitted to it, and comments on certain major issues that constantly arise in its work. This amplification is very justifiable, the louder the watch-dog barks the better.

The RFAC explains its policy on Urban Redevelopment; Very High Buildings, particularly those near Royal Parks; Planning for Traffic, and other matters, including as usual, Street Lighting. In the section on Procedure, there is a reminder that the Royal Commission, in addition to the advice it gives to Government departments and other bodies, may offer advice uninvited on matters it considers of national importance, which means in practice that anyone can bring to the notice of the RFAC questions of 'public amenity or artistic importance'.

Sir William Holford, LL D

The University of Liverpool has conferred upon Sir William Holford, PRIBA, the Honorary Degree of Doctor of Laws. Sir William is a graduate of that University, and was Lever Professor of Civic Design, 1936–47.

Combined Operations or Eternal Triangle?

On 1 May the RICS held a most successful evening in Church House, Westminster, in the form of a dramatic sketch.

Although played for laughs, which it got in full measure from an appreciative and knowledgeable audience, the 'play' had a serious purpose. In the language of the 'commercials' it demonstrated that 'Team Spirit' washed whiter than Brand X. A great deal of preparation and skilled production had gone into the play. The 'client', the architect, the valuation surveyor and the q.s. were all in communication on the small stage by telephones which worked. As Mr Arthur Green who played the client with *brio* said afterwards 'it was exciting to dial and actually get the other chaps' (about three feet away).

To give the play reality, an actual site, fraught with drama, in the shadow of Big Ben and over the Underground, was chosen and documented with development plans and a most conscientious perspective. The cast, in which Mr Cyril Elsom [*F*] played the architect, rattled through their parts with great spirit – they had some excellent lines which made many good points, enabling the professional trio to convert a difficult but human client from a feeling that they were all ganging up on him into admiration for the way they co-operated.

Housing in England and Wales

A statement by the Royal Institute of British Architects

The RIBA has considered the White Paper 'Housing in England and Wales' published by the Minister of Housing and Local Government in February and the general contents of the Housing Bill now before Parliament. The RIBA particularly welcomes the proposal to make exchequer loans to approved non-profit making housing associations to build houses to let at economic rents.

The RIBA believes that the proposed subsidy arrangements will assist local authorities, which pass the test of resources, in coping with their housing problems in a more logical way than was possible when subsidies were limited to housing for a few specific purposes and there was no subsidy for general need. There is no reference in the White Paper, however, to the particularly difficult problems of urban renewal and comprehensive redevelopment where housing is an important element. It is considered that additional subsidies should be granted to assist authorities dealing with the difficult problems involved.

The RIBA would welcome any steps that could be taken to remove the artificial distinctions between housing and town planning in consideration of the administrative and financial aspects involved in comprehensive redevelopment. The increasing need for the renewal of the older parts of our towns and cities seems to call for a review of these aspects in their wider setting.

The higher rates of subsidy payable on a graduated scale for high blocks of flats, and other special and additional subsidies, remain unchanged. The existing subsidy arrangements have, however, been strongly criticised because they discourage three-storey buildings. This is often a particularly valuable form of development because flats can be provided without lifts and the additional height provides relief from the monotony of continuous two-storey development. It is also useful in providing a variety of accommodation. This point should be re-examined.

The paragraphs on the land problem show that the Government recognises the extreme difficulties of the present situation, but the RIBA doubts whether the exhortations and proposed consultations described in the White Paper go very far towards removing these difficulties. The problem is not entirely one of allocating land for development. Extensive areas of land already zoned and usable for houses are not, in fact, being made available for development by their owners for a variety of reasons. Unless measures are taken to make this land available for development, pressures on green belts will increase. It is most undesirable that more land should be zoned for development while land already so zoned remains unused. In this connection it is the opinion of the RIBA that the White Paper might well have devoted more attention to the relevance of increased densities and making better use of land.

The proposals intended to encourage modernisation of old buildings are of value, but the RIBA is concerned lest the indiscriminate modernisation of individual houses should delay the redevelopment of areas which are already obsolete, and which should be renewed comprehensively at an early date. Where authorities have proposals for redevelopment within the next 15 years no improvement grant is payable, but there are many areas where the local authorities should have proposals for redevelopment within 15 years but have not. In these areas the modernisation of individual houses can prejudice the proper redevelopment of the areas on comprehensive lines and it would seem desirable for the Ministry to require authorities, if they have not done so, to submit proposals for comprehensive development areas where the layout and condition of property would justify such a course.

The Architecture of Technology

The object of this article is to draw attention to the issues raised by the theme of the IUA Exhibition: 'The Impact of New Materials and Techniques on Architecture'.

At the invitation of the Editor, W. A. Allen, Denys Lasdun and Edward Mills met at the RIBA in April under the Chairmanship of Gontran Goulden and were shown by Theo Crosby the photographic material sent in by 26 countries for the exhibition he was arranging.

After a free discussion, the Chairman drew up 14 main points. Mr Allen, Mr Lasdun and Mr Mills have each contributed their personal comments under these headings.

The Editor wishes to thank all five members for the time devoted to this work.

1. 'Architecture' today means not only the outsides and insides of buildings, but groups of buildings and their surroundings.

ALLEN: It is the sense of congruity that so often matters – the feeling that, as between the planting, the layout, the street furniture and the buildings, there is harmony and consistency. Perhaps it mattered less at times in history when one approach to design was common to all. Perhaps something like this will prevail again before long. But at this moment the architect's influence should spread throughout the whole, if only to demonstrate what we should be able to achieve readily by common effort.

LASDUN: Architecture has *always* been concerned with the context in which it finds itself – either isolated building, building in a hamlet or village or town or city. Spaces between buildings are as important as the buildings themselves. The characteristic change in the nature of these spaces today is concerned with rhythm of movement – pedestrian and vehicle. Primary task of architecture is to make a decent environment which will present people to one another and help them to a wider vision of life, both as individuals and as members of the community.

MILLS: In a society dominated by the machine, it is vital that groups of buildings and their surroundings are related to the human scale. It is only by this means that the relationship between buildings and their users will be satisfactorily maintained.

2. The buildings illustrated in the exhibition show that technology is not making an adequate contribution to fine architecture.

ALLEN: Many of the buildings seem to show that the building methods and materials have not been developed for the making of sensitive architecture, but for some lesser purpose such as the mere enclosure of space. Yet they have much influenced and limited the design. We have still some way to go before our methods and our purposes as architects are properly integrated.

LASDUN: *The following comment concerns items* 2, 3, 5 *and* 6. Technology provides a method of building which influences, but never totally dominates, the end product if that end product is seen as a human contribution. Architecture is a discipline which involves people and technology. Technology is a repository of knowledge which can or cannot or need or need not be used positively or negatively. Technology is an extension to and not an exclusion from architecture. In the IUA exhibits, technology has certainly been exploited, particularly in the field of precasting. With few exceptions, these contributions demonstrate a failure to respect a feeling for place and space. The emphasis must, therefore, shift, in terms of means of production, from quantity to quality – the same sort of quality on a visual level which created the anonymous vernacular of the past.

We live in an age where world population is soaring. Advances in technology and mass production will enable a greater number of people to live in comfort, convenience and hygienic conditions, but the results must express a human concern.

Architecture will move forward by architects assimilating new techniques and evolving a language of form which is understood and loved by society. Technology, left to its own devices, will only produce a wilderness of mechanisms, which is what the IUA exhibition largely portrays. As technology advances, so architects' methodology will have to change. Graphical plans, sections and elevations are no longer adequate to reveal the truth, either to the architect or to the builder. The final act of building involves:

(*a*) design of structure where technology influences design and choice of materials;

(*b*) handling of materials – their collection on the ground and their assembly in space, *cf.* tower crane.

MILLS: The buildings in the exhibition illustrate clearly that technology is one of the tools that the architect uses in producing fine architecture. Technology by itself cannot produce architecture but requires to be used with imagination and sensitivity in order to produce a satisfactory result, both aesthetically and practically.

3. Architecture is more than 'technology'. The housing section of the exhibition shows that nations have generally speaking failed to make a satisfactory place for people to live in.

ALLEN: *See comment on* 2.

LASDUN: *See comment on* 2.

MILLS: The fact that technology is not an end in itself is illustrated most clearly in the housing section, where the human aspect has largely been neglected and where in many cases the scale and relationship of units has been determined more by the technology than the needs of those who will live in the buildings. The task of the modern architect is not only to produce a building which is efficient and economic technically, but one that produces a satisfactory environment for human living and activity.

4. In engineering, and particularly in the conquest of the air and of outer space, change is very rapid. Building methods change very slowly.

ALLEN: But building is very greatly affected by economic and geological factors. Engineering depends relatively highly upon metals and plastics, which tend to be expensive, rare, versatile, and short-lived. Building calls for huge quantities of low-cost materials, generally timber, earths, sands and rocks, with relatively high durability. Their replacement by metals tends to increase costs, both basically and because some of the functions of structures such as sound insulation and fire resistance are more easily satisfied by the other materials. Moreover, the reduction of mass increases sensitivity to climate and calls for more indoor climate control.

LASDUN: Obsolescence in building is slow and patterns of living are also slow in terms of rate of change. Changes in building methods are usually justified for economic reasons – economy of means, of materials and of money. It is an economic factor which is producing the situation where labour is becoming progressively scarcer. Men may prefer to work in a factory. *In-situ* techniques will become more expensive than factory-produced techniques. Precasting as a design technique means that materials may be made under laboratory conditions.

MILLS: Building methods change slowly, largely because the building industry is rooted in a craft tradition which has not developed at the same pace as the technical achievements of the industry. Training of craftsmen in the new technologies is of vital importance and as yet has not been adequately considered.

5. Mass production is one of the most important developments in the building of housing. The exhibition shows that this process nearly always leads to the most unsatisfactory results from an architectural point of view. It would be better if the system of standardisation were controlled rather than the end product.

ALLEN: The great disappointment of the British post-war housing effort was that so many prefabrication methods were directed to the making of complete houses of fixed design. One undoubted success of the schools prefabrication systems was their versatility and the fact that the results could easily be architecture of quality. So the system needs not so much control, but to be designed and developed for versatility, economy, durability, and the making of architecture.

LASDUN: *See comment on* 2.

MILLS: The mass production of whole buildings is probably the least satisfactory way of producing architecture. The urgent need is for proper architect control of the units of standardisation and the method of assembly related to a system of co-ordination, so that standardised units can be arranged in a number of ways to produce variety and interest in the end product.

6. Techniques by themselves cannot produce good architecture. They are merely organisational devices used for economic reasons, for convenience, or speed.

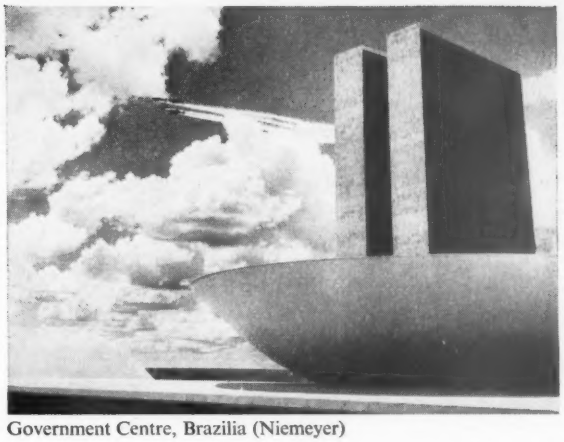
ALLEN: Good modern architecture can be done in primitive countries by primitive methods. It does not depend upon techniques. The fact that techniques are produced which are economic, convenient or quick is something which our way of design can respond to, and this is one of its merits as well as one of its formative forces. But some techniques, perhaps most obviously curtain walls, are brought into existence partly, if not wholly, to express a particular character that designers feel to be right and desirable, in this case as a reflection of our increasingly mechanised ways of living.

LASDUN: *See comment on* 2.

MILLS: Techniques are merely a means to an end and the success of the architecture produced must depend entirely upon the skill and imagination of the architect, and his ability to relate his buildings to the human scale.

7. Buildings should be made of large pieces. With modern techniques this is a logical development. Buildings should look as if they are built in this way and should not imitate the appearance of those built by hand in small pieces.

ALLEN: Both ways are perfectly logical in the right circumstances. History will eventually tell us whether buildings should be made of large pieces as a generality. We may easily decide they are too insensitive as a method of design. But whatever method is used should be expressed in the design.



Government Centre, Brazilia (Niemeyer)

LASDUN: This is one stream of current building technology. There is another stream in which the whole form becomes a single mould, smooth or intricate – spray techniques, continuous shell, services, stabilised earth forms, moulded plastics. Buildings should be made of large pieces only if such large pieces suit the architectural programme.

MILLS: One of the greatest failings of buildings made of large-scale units is their unsatisfactory aesthetic appearance. This is particularly so in countries where large-scale units have become the common practice for housing. A new aesthetic approach is required to ensure that buildings made of large units should express this fact in their appearance, but at the same time retain an overall sense of proportion and elegance, which is sadly lacking in most cases.

8. Architects are not well served by modern materials and building products.

ALLEN: Architects and the makers of building products need to get together wherever the product influences the assembly, appearance or function of a building. Anything that has design content in it should be produced so that it meets the needs of designers. There have been many sad shortcomings in this respect. Product makers often need to learn how to integrate designers into their organisations; without this, much of the sensitivity and versatility we need will be lacking.

LASDUN: *The following comment concerns items* 8, 9 *and* 10. These points are related back to statements 2, 3, 5 and 6. Most improvements are marginal advances on existing materials or substitutes for them. Few, if any, start from a known performance demand and then try to evolve the best possible answer (compare, for example, aircraft production). This aspect requires architectural insight on the part of designers of buildings and designers of parts of buildings. Standardisation, as has been said elsewhere, will alter the whole position of the architect in industry. Standards will form an integral part of his functions as a designer in order to secure order by reducing an unnecessary number of variables in the process of building. Development of standardisation with new methods and materials will radically alter established ways of *how* things should be done, but not necessarily *what* things are done. Architects may well become either industrial designers or designers of buildings, but not both.

Techniques of jointing are developing. We now know more about welding, glue, friction bolts, etc., with the result that some traditional materials are being revitalised, *cf.* laminated timber arches.

MILLS: Many modern materials and building products have developed in a haphazard way with little thought for their ultimate use. Too little care has been given to the way in which modern materials and products fit together in a building, and insufficient use has been made of skilled designers by

the building industry to ensure that the things produced have an affinity with the architecture of which they will ultimately form part.

9. At present industry decides upon the introduction of new materials and products without reference to architects. Too few of the things which go into buildings are designed by people with any sense of architecture.

ALLEN: *See comment on* 8.

LASDUN: *See comment on* 8.

MILLS: The introduction of new materials etc., is often decided upon without any clear picture on the part of the manufacturers of their ultimate place in modern building. This haphazard approach should be strongly discouraged, and the industry must be required to consider the needs of architecture, and produce materials and products which fill those needs, rather than the present system whereby a material is produced and a search is then commenced to find how it can be used in building.

10. Architects should play a greater part in the design and production of the things out of which buildings are made.

ALLEN: I think this should be integrated with question 8. As a general comment, unless there is a partnership between the two sides at this moment in history, there are going to be a great many sad lapses, missed opportunities, and needless difficulties in making good design. To a large extent the prosperity of the manufacturing side is bound up with the success it has in meeting the needs of designers.

LASDUN: *See comment on* 8.

MILLS: If we are to get better buildings which are both functional and visually more satisfactory, architects must be involved in the design of the individual parts, which in earlier days were tailor-made for each job, but which now, because of economic conditions, are mass produced. Some enlightened industries are already employing consultant architects and designers, and this trend must be encouraged.

11. The engineer must dominate in single cell buildings where structure is paramount. The architect must dominate in multi-cellular buildings where planning is complex and where human problems have to be dealt with.

ALLEN: This is a convenient distinction between the spheres of responsibility of two linked professions. Both should be trained in design while having a different bias of education and of responsibility in mature life.

LASDUN: Buildings will tend to fall into two categories:

(*a*) Uni-cellular; (*b*) multi-cellular.

(*a*) Primarily a membrane structure. Lightweight. The engineer will tend to lead the team in uni-cellular buildings and technology may influence uni-cellular buildings more than multi-cellular. The assumption made here is that the uni-cellular building is large and the function of shelter simple, i.e. a market hall or aircraft hanger, but not a concert hall.

(*b*) Multi-cellular buildings imply horizontal division, i.e. floors. Weight required because of sound insulation, etc. Architect will lead team in this category.

The foundation of engineering is knowledge of materials – 'How they stand up to stress, break, fire and to all the agencies of ruin perpetually nibbling at them – and how, in due course, they fall down.'*

The foundation of architecture is the knowledge of human beings – how they see, feel, act, react, live and eventually die.

MILLS: It is essential that the engineer should dominate single cell buildings, but it is vital that the architect concerned with large single cell buildings should have a genuine knowledge and appreciation of structure and structural forms, for these play a dominant part in such building types. The multi-cellular complex structure is one where only the architect can lead for the problems are basically planning ones which relate not only to plan but section, and are vitally concerned with human relationships and human scale.

12. At present attention in building is focused on structure and walling. In future mechanical services will control and dictate the shape of buildings.

ALLEN: Not control or dictate, but perhaps give more freedom, with some influence on planning.

LASDUN: *The following note concerns items* 12 *and* 13. These points are related back to statements 2, 3, 5 and 6. As society becomes aware of performance and quality (creation of physical comfort), clearly the aspect of services will become more and more important. Dominance of structure in the architectural format will give way to dominance of services. Structure will be placed where most convenient. Buildings are controlled and dictated by context and human needs of which mechanical services are a part. At present, the services of a complicated building may constitute 35 per cent of the total building value. Development in science will concentrate on problem of services. Physics undergraduates may well drift into this profession.

MILLS: The fact that man can now control his environment and produce any given form of climatic background within his buildings, means that this factor will be one of the most dominant in the shape of future buildings. We are no longer dependant upon natural lighting and ventilation, heating or cooling. These can all be provided by artificial means, in many cases more satisfactorily than by natural means. This must of necessity influence the shape of buildings, particularly as plant and equipment for these purposes and for other services demand considerable volumes of space within the building.

13. The ability to control climate within buildings will affect building design. We are no longer tied to windows in planning.

ALLEN: Yes and no. We can do a lot to make life acceptable in buildings at inner parts remote from the fresh air and light of windows. But I doubt if we can make it very acceptable without views except in some circumstances, for example some kinds of factories, and department stores, and perhaps art galleries. In most other cases I think people will want to be able to see out at least occasionally as they work.

LASDUN: *See comment on* 12.

MILLS: *See comment on* 12.

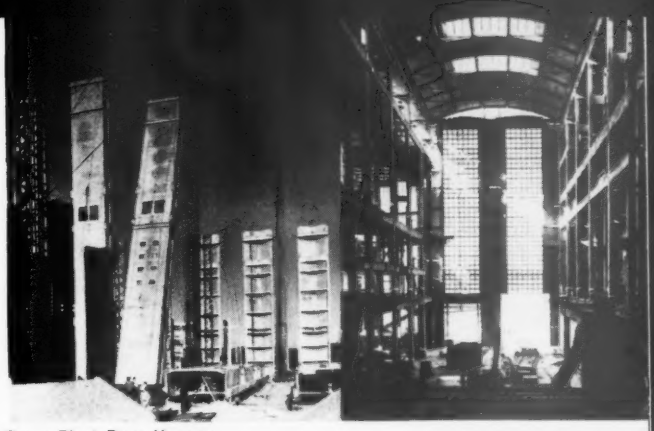
14. In the future building owners will expect architects to design buildings for them which are capable of absorbing change without the necessity of structural rebuilding.

ALLEN: No country can afford rapid obsolescence, but at the same time few can afford to keep a large fixed investment of inefficient buildings. Compromise along the lines of the statement seems an obviously right course of action.

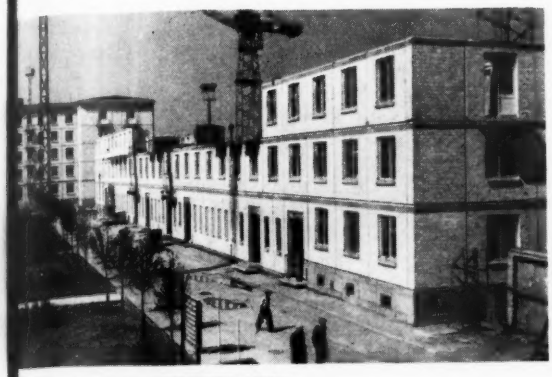
LASDUN: The concept of 'growth' being, as it were, built into urbanism and the design of buildings, will prove as great an influence in architecture as were the discoveries of Vitruvius to the Renaissance. The permanent elements in planning and building will be the routes, total enclosure, services, focal points. These are the elements which will give a sense of place, space and time. These are the constants whereas the other parts may be variables. Some buildings remain 'permanent' even though they are built of impermanent materials. The Nash terraces, for example, are concerned with permanent values and are, therefore, restored, protected and adapted long after their original function has changed. Nevertheless, in-built flexibility will be a key factor in tomorrow's architecture.

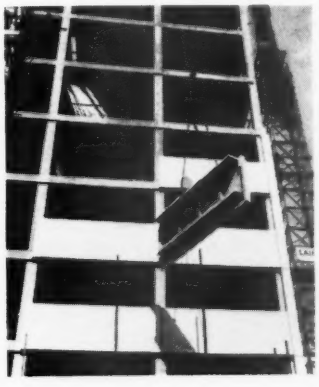
* *Architectural Misconceptions of Engineering* by A. J. Harris.

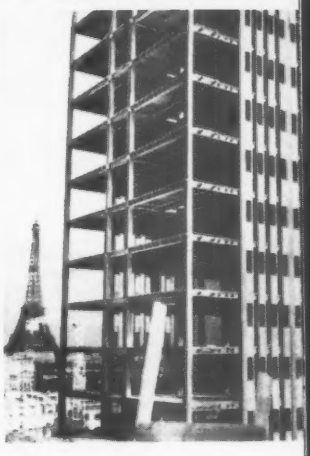
Rural Schools, Mexico (P. R. Bazquez): the structure is entirely prefabricated. Many problems had to be overcome including transport by various methods over hilly regions



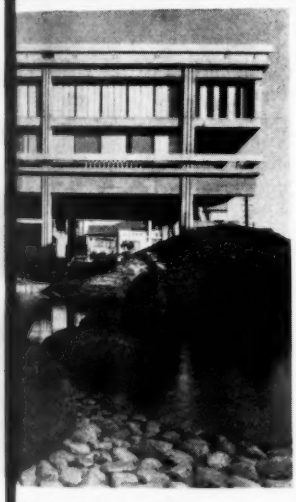
Power Plant, Pecs, Hungary. (G. Matrai and K. Pasti): prefabricated 53-ton pillar being placed







Maison de la Radio, Paris (H. Bernard): faced with prefabricated aluminium panels incorporating windows

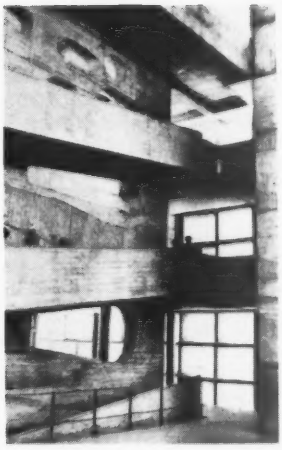


Kagawa Prefectural Office, Takamatsu, Japan (Tange, Asada. Kamiya, Oki): all structure is in exposed reinforced concrete

Large scale block of flats in Leningrad under construction (E. Levinson)

Flats in London (Stillman and Eastwick-Field): construction above second floor entirely of pre-cast units

Grandstand, Stadium of the Olympic Village, Cartagena, Colombia (J. and R. Obregon, P. de Valenzuela, H. Tapia, S. Rigaurte, M. Carrizosa, J. Prieto, E. Pombo and G. Samper)



High Court, Chandigarh, India (Le Corbusier): constructed entirely of reinforced concrete

Housing in Schaffhausen, Switzerland (W. Vetter): brick cross-walls with factory-fabricated timber infill panels

MILLS: The way of life in many human fields is changing rapidly, educational methods are constantly being reviewed, industrial processes are changing and standards of accommodation for living and work are rising every year. This suggests that buildings in the future must be capable of accepting such changes without complete rebuilding. This may well be achieved by envelope buildings which have a permanent structural core and frame work, but which can be modified internally without major structural work. The use of demountable partitioning, demountable ceilings, replaceable wall panels and interchangeable internal units, must inevitably develop to meet the necessity for quick and economical modernisation.

Summing up by the Chairman

GOULDEN: This for the most part seems good sound sense. But how are all these essential requirements to be fulfilled? The numbers of people in the world who care about these things are small compared with those who do not. Architects' powers are strictly limited and their total capacity for doing good is tiny when seen against the world of technology. An extension of architects' influence throughout the world would appear to be vital. This can only be brought about by hard and continuous campaigning, by loud shouts and by the beating of drums.

(The illustrations are examples from the Exhibition.)

Architecture Today Exhibition

This exhibition has been sponsored jointly by the Arts Council of Great Britain and by the Royal Institute of British Architects and will be on show at the Arts Council Galleries, 4 St James's Square, SW1, from 28 June to 29 July. It has been timed to coincide with the Congress of the International Union of Architects.

The exhibits cover a selection of the best work executed during the last ten years and were chosen by a panel consisting of the Hon. Lionel Brett, Sir Hugh Casson, Mr John Killick, Mr John Piper and Mr J. M. Richards. Mr Trevor Dannatt and Mr Allan Irvine designed the exhibition and Mr J. M. Richards has written an introduction to the catalogue, passages from which he has kindly allowed to be quoted.

Following the London showing the Arts Council are arranging to tour the exhibition to a number of centres in different parts of the country and discussions are taking place with the British Council with a view to touring copies being prepared for sending abroad.

The majority of the buildings selected are illustrated on pages 297–317, but not necessarily by the identical photographs chosen for the exhibition.

Extracts from the Exhibition Catalogue by J. M. Richards, CBE [A]

Exactly five years ago a selective exhibition of British architecture was held in these galleries. It dealt with the work of one decade – that of 1945–55 – the decade that saw the resumption of building after the war. It was therefore more than a picture of the buildings that had been put up in a period of ten years. It placed on record the work of a new generation which had had to wait until the war ended for opportunities to build, and for whom the war represented not only an unprofitable interval of time but a break between different architectural outlooks. When building started again many ideas, which the pre-war pioneers of modern architecture had embodied in the few isolated structures their struggle against disinterest and conservatism had gained them the opportunity to design, were applied on the broad social basis, and with the support of the partly industrialised building industry, which the philosophy of the new architecture had always demanded.

The result was a number of developments that at last enabled Britain to make a significant contribution to the evolution of modern architecture. . . .

The present exhibition covers the six years that followed – 1956–61. It might be expected that it would simply show the architectural revolution of the 1940s being further consolidated, but in fact in the last few years the scene has changed again. In 1956 another era begins, with its own distinct character, and the somewhat more confusing picture presented in this second exhibition is explained by the many different ideas which are now current but which have not all been yet fully worked out. . . .

The different spirit that informs modern architecture after about 1956 is not, however, simply the result of the greater scope and variety of the architects' tasks. There are evident changes in their aesthetic ideals and intentions coinciding with the end of the revolutionary period. To say that by 1956 the revolutionary phase of modern architecture was over does not, of course, mean that the battle had been won all along the line. It is only necessary to look around in any town or city to see how much progress still has to be made. In Britain especially, architecture seems to occupy several timescales simultaneously, and a sample of typical new buildings would include a bewildering variety of styles and attitudes – some, though exemplified in brand-new buildings, going back to the beginning of the century. . . .

But it is not the purpose of the present exhibition to explore this depressing urban scenery. Rather than show a sample of typical new buildings, its aim is to present a choice of what the selection committee thought, among buildings completed in the six years under review, were the best, were closest to the main, forward-moving stream of architectural development and were the most vital aesthetically and functionally. These buildings – only about 50 in all – are the outcome of the revolution of the generation before. Yet when they are isolated from the miscellany of buildings that surrounds them on the ground – as they are when displayed on the walls of these galleries – it is possible to discern in many of them a character quite distinct from that of their fellows of a decade earlier.

One thing that has been steadily more evident since 1956 is a search by architects for more various and complex – on occasion even fantastic – forms such as the doctrinaire insistence on the basic – and at that time revolutionary – principles of modern architecture would not have permitted in 1950 – and still less in 1930. The purists of those epochs would accuse some of the work shown here of backsliding into formalism, although as a matter of fact much of the enrichment of the architectural vocabulary that has recently taken place has been the outcome of a more profound study of the building's use. . . .

It may be said also that the better architects are now becoming aware of the need for quality and for a building to reflect positive ideas. Simply to betray no stylistic ancestry, and to follow the dictates of function without guiding them where the eye wants them to go are no longer enough. The process of change has been hastened, too, by the imaginative – which does not mean the unfunctional – exploitation of such materials as pre-stressed and shell concrete. The way these and other materials, old and new, are used is admittedly often coloured by fashion as well, but there is nothing essentially immoral about fashion or style if it does not degenerate into applied decoration. Through fashion, and the style fashion helps to establish, an architectural language is evolved that each generation – indeed each decade – can promptly recognise as its own, a process that is not incompatible with the responsible application of means to ends on which the successful fulfilment of a building programme depends.

Nor is a certain wilfulness. Architecture, if it is not to become narrow and doctrinaire, must develop all the time, and often development takes the form of apparently contradictory and nonconformist movements which are evidence of vitality. Nevertheless, if willingness to diverge experimentally from the norm is a sign of a new maturity, the quality of the norm itself is the test by which current architecture must be judged, and this exhibition contains a number of buildings which, without grand pretensions, justify their inclusion simply by showing the ability to handle a modern idiom in a capable and assured fashion. . . .

The other comment is that the buildings chosen are depicted in these photographs in isolation. This exhibition is not concerned with the relation of buildings to each other or to their setting, although this is becoming an increasingly important part of architecture – in so congested a country as Britain a vital part. As our towns are split apart by the new road-works that the domination of the motor-car over modern life demands, as the countryside is suburbanised and old built-up areas decay and are renewed, as high buildings transform the character of the city skylines, it becomes necessary for our environment to be the product of foresight, not of chance accretions. Hence the new arts – closely related to architecture – of town planning and civic design. Hence our view of individual buildings as parts of a far greater whole and our need to judge the quality of our architecture, not only by what we can see on these walls, but by what architects succeed in doing to make our whole physical environment more agreeable to inhabit.

John McCan

ARCHI

Colin West

RIBA JO

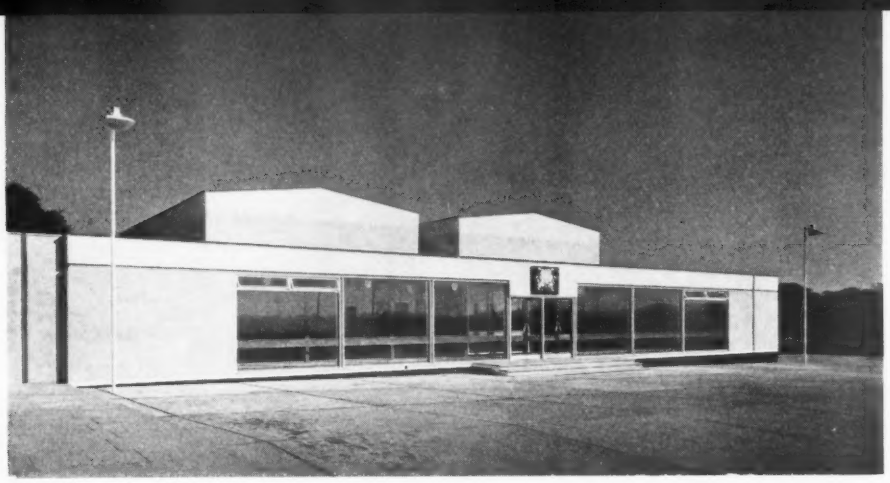
John McCann

Town Centre, Stevenage New Town. 1958–59
L. G. Vincent [*A*], Chief Architect and Planner
Stevenage Development Corporation

Gatwick Airport. 1958
F. R. S. Yorke, E. Rosenberg
and C. S. Mardall [*FF*]

ARCHITECTURE TODAY: SOCIAL

Colin Westwood



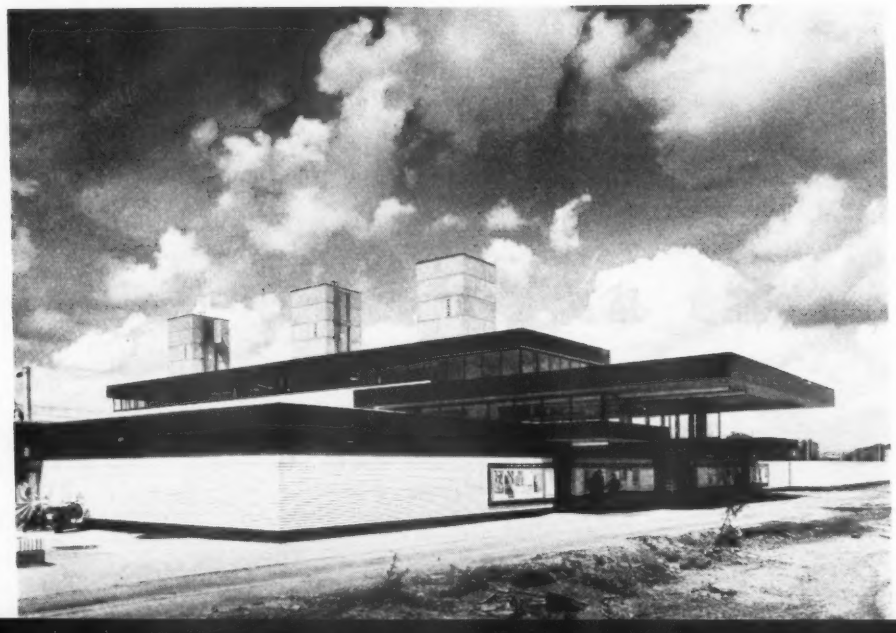
Wainwright

Magistrates' Courts
Harlow New Town. 1959
Frederick Gibberd, ARA [F]
in association
with Harold Conolly [F],
County Architect, Essex

de Burgh Galwey

Princess Margaret
Hospital
Swindon, Wiltshire. 1959
A. J. P. Powell and
J. H. Moya [FF]

British Railways



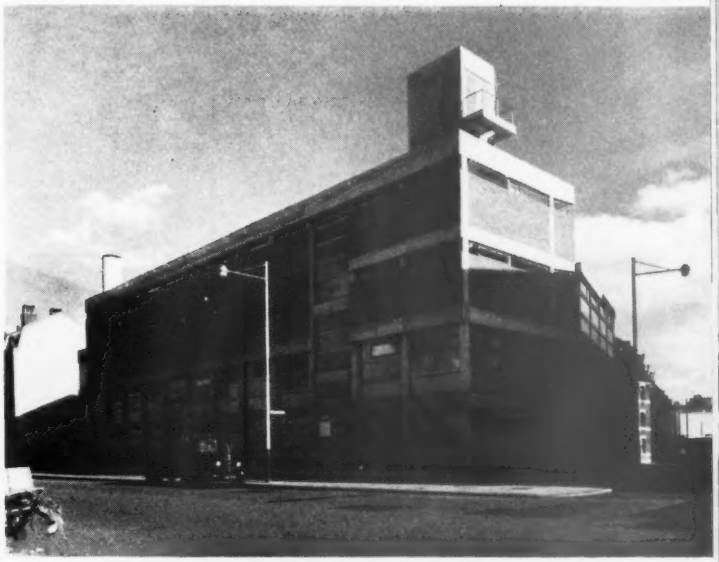
Harlow Town Station
Harlow New Town. 1960
H. H. Powell [F],
Architect to British
Railways, Eastern
Region

rman Gold

St Paul's Church
Bow Common, Stepney. 1960
Robert Maguire [*A*]

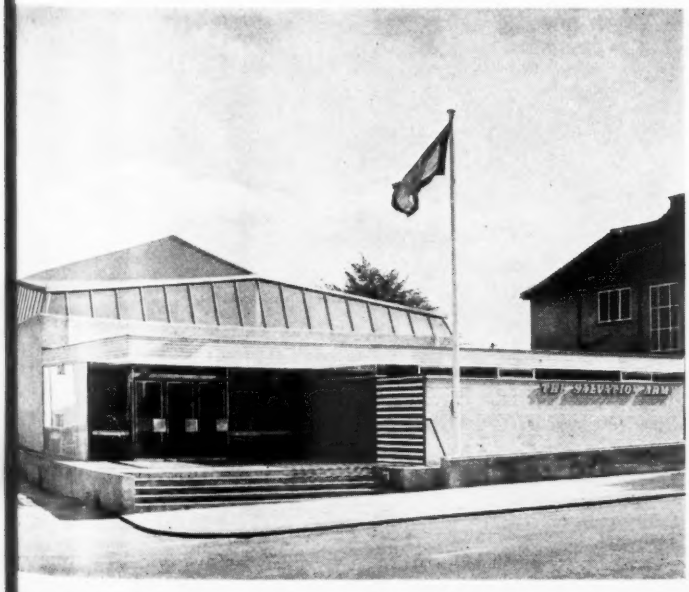
de Burgh Galwey

Trades Union Congress Building
Great Russell Street, London. 1957
David du R. Aberdeen [*F*]



Theatre Workshops and Offices
Old Vic Annexe, London. 1958
E. D. Lyons, L. Israel
and T. B. H. Ellis [*AA*]

n Bros

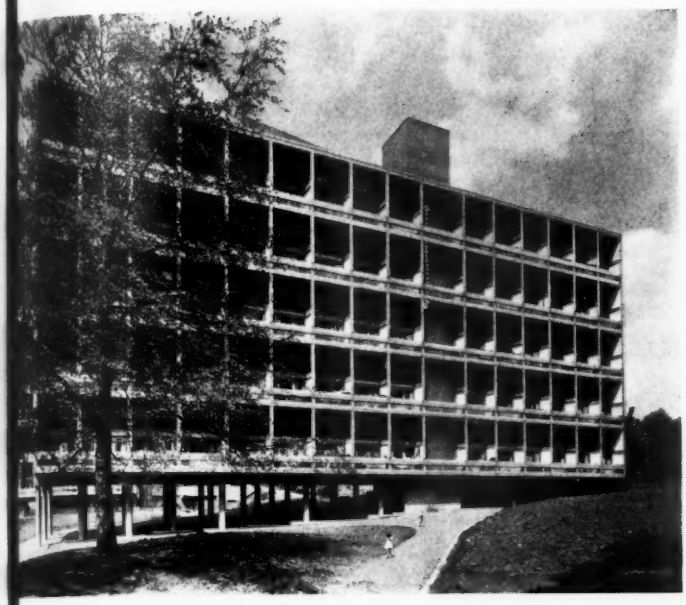


Salvation Army Citadel
Hendon, London. 1957
C. Wycliffe Noble [*A*]

ARCHITECTURE TODAY: HOUSES AND HOUSING

Luxury Flats
St James's Place, London. 1960
Denys Lasdun and Partners [F A]

Flats at Langham House Close, Ham Common Richmond, Surrey. 1957
James Stirling and James Gowan [AA]



LCC

Alton Estate (West)
Roehampton, London. 1959
Hubert Bennett [*F*]
Architect to the LCC

Eric de Maré

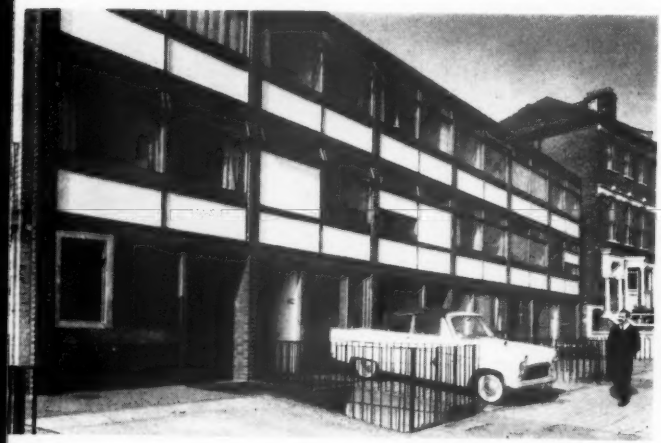
Regent's Park Housing
Redevelopment, St Pancras. 1960
Edward Armstrong
and Frederick MacManus [*FF*]

Ivor Smith

Housing Redevelopment
Park Hill, Sheffield. 1961
J. L. Womersley [*F*]
City Architect, Sheffield

Waverley Studios

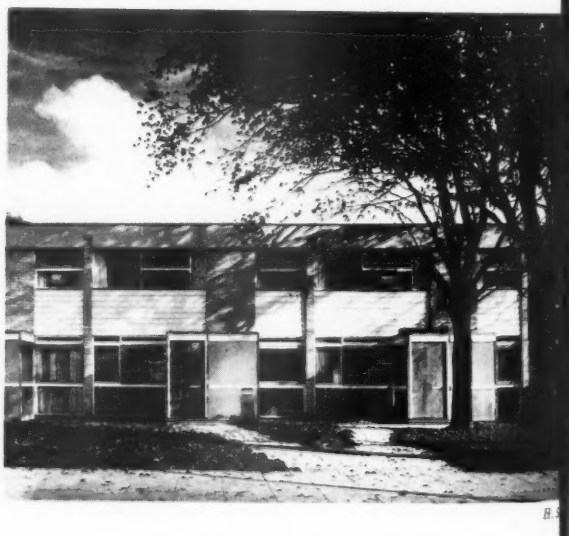
de Burgh



Eric de Maré

Peterlee Development Corpo

Douglas Whittaker



H.

Private House, 'High Sunderland'
Galashiels, Scotland. 1957
Peter Womersley [*A*]

Terrace of Six Houses, South Hill Park, Hampstead. 1956
S. F. Amis [*A*], W. G. Howell [*A*] and G. Howell [*A*]

Private House, Warren Road, Kingston upon Thames
Surrey. 1959
Kenneth Wood [*A*]

Village Housing and Clubhouse, Rushbrooke
Suffolk. 1955
R. Llewelyn Davies [*F*], John Weeks [*A*] and Michael Hucksteppi

Housing Community, SW Area
Peterlee New Town, Co. Durham. 1960–61
Peter Daniel [*A*] and F. G. Dixon [*A*], with Victor Pasmore

Houses, Corner Green, Pond Road, Blackheath. 1959
Eric Lyons [*F*]

Notes and Notices

NOTICES

Session 1960–61. Special General Meeting. At a Special General Meeting held on Tuesday 25 April 1961 at 6 pm, Mr Herbert Jackson, Vice-President, in the Chair. The Meeting was attended by about 70 people.

The Chairman explained that the meeting had been called for the purpose of considering and, if thought fit, approving the Council's recommendations for the revision of the Bye-laws, these revisions having been drafted in accordance with the recommendations of the Constitutional Committee as approved by the Council and published in the July 1960 issue of the RIBA JOURNAL.

Copies of a pamphlet setting out the existing Bye-laws together with the proposed revised Bye-laws had been circulated to every member and were before the meeting for consideration.

It was agreed to take the Bye-laws seriatim.

RESOLVED that the revised draft Bye-laws 1 to 27 inclusive be approved.

After discussion,

RESOLVED that the revised draft Bye-law 28 be approved with the following amendment: In Bye-law 28 (*a*) (11) add at end:

'Nevertheless, in the event of the President not being a corporate member of the Royal Institute, the Council of the Royal Institute of the Architects of Ireland shall have power to nominate one of their Council members who is a corporate member of the Royal Institute to serve in place of the President.'

RESOLVED that the revised draft Bye-laws 29 to 33 inclusive be approved.

RESOLVED that Bye-law 34 be approved with the following amendment: In lines one and three, insert the word 'Honorary' before the word 'Officers'.

RESOLVED that the revised draft Bye-law 35 be approved with the following amendment: Immediately before the last paragraph insert a new paragraph:

'Any vacancy caused through the death or resignation of the member representing the Royal Institute of the Architects of Ireland shall be filled by the succeeding President of that Institute or, if he be not eligible, as provided in Bye-law 28 (*a*) (11), then by nomination by the Council of the Royal Institute of the Architects of Ireland.'

RESOLVED that the revised draft Bye-laws 36 to 40 inclusive be approved.

RESOLVED that the revised draft Bye-laws 41 to 52 inclusive be approved with the correction of the typographical error in the first line of Bye-law 41 to read 'of the Secretary' in place of 'or the Secretary'.

RESOLVED that the revised Bye-laws 53 to 55 inclusive be approved with the following amendment to Bye-law 54: For '20' corporate members substitute '50' corporate members.

RESOLVED that the revised draft Bye-laws 58 and 60 to 78 inclusive be approved with the following amendment to 78 (*a*) (11): After 'the President' insert 'or representative'.

An extended discussion took place on the principles underlying Bye-laws 56 and 59 in connection with the powers of General and Special General Meetings to override decisions of the Council.

After a number of resolutions had been passed effecting amendments in detail to these two Bye-laws, by general agreement it was left to the Secretariat to redraft the two Bye-laws to give effect to the sense of the meeting that a General Meeting requisitioned by private members should not have power to pass a resolution binding on the Institute but only to require the Council to review the situation.

Mr Gibson moved that subject to the approval thereof of the Lords of Her Majesty's Most Honourable Privy Council, the amendments made to these Bye-laws other than numbers 56 and 59 incorporating the further amendments made this evening be made and adopted by the Royal Institute.

RESOLVED accordingly.

The Chairman announced that a further Special General Meeting would be held on Tuesday 9 May prior to the Annual General Meeting to confirm the resolution just passed and to consider further the question of Bye-laws 56 and 59.

Ninth General Meeting, Tuesday 27 June 1961 at 6 p.m. The Ninth General Meeting of the Session 1960–61 will be held on Tuesday 27 June 1961 at 6 pm for the following purposes:

To read the report of the Scrutineers appointed to examine the voting papers for the election of Council for the Session 1961–62.

To present the London Architectural Bronze Medal 1960 to Messrs Denys Lasdun and Partners (Mr Denys Lasdun, MBE [*F*] and Mr Alexander Redhouse [*A*]) for a block of luxury flats at 26 St James's Place, SW1, a replica of the Medal to a representative of Malvin Investment Company Ltd, as the building owners, and a Diploma to a representative of J. Jarvis and Sons Ltd, the contractors.

To present the RIBA Award for Distinction in Town Planning to Mr Percy Johnson-Marshall, DIPL ARCH (L'pool), AMTPI [*A*], Mr Eric Lyons, OBE [*F*], and Sir Basil Spence, OBE, TD, RA, ARSA, RDI [*F*].

To present the Royal Gold Medal for 1961 to Mr Lewis Mumford [*Hon. A*] (USA).

(Light refreshments will be provided before the meeting.)

Election Void. Under the provisions of Bye-law 17 the election as Associate of the following has been declared void: John Geoffrey Bargh.

RIBA Award for Distinction in Town Planning. The RIBA Award for Distinction in Town Planning, which is the only award in town and country planning bestowed by the RIBA is by conferment only and is limited to Fellows, Associates and Licentiates of the RIBA. The Award recognises outstanding achievement in town planning and civic architecture.

Recommendations are submitted to the Council by a Standing Committee set up for the purpose. Personal applications by candidates are not entertained; the name of a candidate must be submitted by three or more sponsors, themselves members of the RIBA, who are required to submit details of the candidate's professional qualifications and experience, and evidence relevant to the nature of his particular contribution. Nominations may be made twice annually, on 1 March and 1 November, and must be addressed to the Secretary, RIBA, 66 Portland Place, London, W1.

Members upon whom the Award has been conferred are entitled to use the designation 'RIBA Award for Distinction in Town Planning' and it is advised that this should be used in full, or the affix 'RIBA Dist. TP' used after the initials 'FRIBA', 'ARIBA' or 'LRIBA' according to the class of membership.

The IUA Congress, 1961. The IUA Congress, 1961, the theme for which will be 'New Techniques and Materials – Their Impact on Architecture' will be held in London from 3–7 July 1961. This will take the place of the British Architects' Conference.

Competitions

Note. An applicant for the conditions of a competition must state his registration number.

Government Office Building and Conference Centre. Last day for submitting designs: 12 noon on 2 October 1961. Full particulars were published in the JOURNAL for April, page 221.

Housing Development in Hertfordshire. The Watford RDC are to promote an architectural competition for mixed development on a site of eight acres at Bedmond, Abbots Langley.

Assessor: Mr Clifford Culpin, OBE, MTPI [*F*].

Particulars will be published shortly.

City of Lincoln: Civic Centre. *The date for submitting designs has been extended to 8 August* 1961. Full particulars were published in the JOURNAL for January, page 102.

City of Westminster: New Housing Scheme. Last day for submitting designs: 10 July 1961. Full particulars were published in the JOURNAL for January, page 102, but in addition it should be noted that *corporate members of overseas societies allied to the* RIBA are also invited to compete.

The Gas Council House Design Competition. The Gas Council invites architects and Students RIBA if in association with a registered architect to submit designs in competition for four types of dwellings.

Assessor: Mr George Grenfell Baines, OBE, MTPI [*F*].

Premiums (for each type): £500, £300, £200. At the discretion of the assessor the second and third premiums may be merged and divided into a larger number of prizes for designs of merit.

Last day or submitting designs: 31 August 1961.

Conditions may be obtained on application to The Secretary, House Design Competition, The Gas Council, 1 Grosvenor Place, London, SW1.

International Competition of Ideas for Church Building. The Danish Ministry of Ecclesiastical Affairs invite architects, sculptors, and painters from the whole world to participate, separately or in groups, in an international competition of ideas with the purpose of exploring the possibilities of working out plans for a Lutheran church in a modern residential quarter.

The programme and other competition material which have been drawn up in accordance with regulations for international competitions in architecture and town planning and for international competitions in painting and sculpture, may be ordered through: The Secretariat of the International Competition of Ideas for Church Building, c/o The Federation of Danish Architects, 66 Bredgade, Copenhagen K, Denmark.

An amount of D.kr. 25 (£1) covering forwarding charges, etc., will have to be paid.

Projects to be sent to organisers by 1 September 1961.

COMPETITION RESULT

Harlow Development Corporation: Competion for Houses and Flats

1. (£1,000) Mr Michael Neylan [*A*].
2. (£750) Mr Geoffrey J. Darke [*A*] and Mr Robert Blom van Assendelft.
3. (£500) Mr David Croghan [*A*] assisted by Mr David Davies [*A*] and Mr Victor Bugg, ARICS.

Commended: Mr F. J. Bancroft [*A*] and Mr Philip Rogers; Mr Alan Goodman [*A*] and Mr A. J. Short [*A*]; Mr M. R. Crux [*A*].

Board of Architectural Education

RIBA Examination for the Office of Building Surveyor under Local Authorities. At the RIBA Examination for the Office of Building Surveyor under Local Authorities held on 12, 13 and 14 April 1961, seven candidates presented themselves, and the following were successful: Colin Green, B. J. G. Levers, C. L. Marshall, A. L. Sargent.

RIBA Ashpitel Prize, 1960. Mr Ian Roger Parsons [*Student*] of 60 Halesleigh Road, Bridgwater, Somerset, who passed the Final Examination in December 1960, obtained the highest number of marks in the Examination held in 1960, and has, therefore, been awarded the Ashpitel Prize.

Mr Parsons, who is 27 years of age, and was elected a Student in July 1955, received his architectural training at the RWA School of Architecture, Bristol.

The Sir Banister Fletcher Prize, 1960. Mr Leslie John Holman of 'Prescott', Old Hill, Longhope, Glos., who passed the RIBA Intermediate Examination in November 1960, obtained the highest number of marks in the Intermediate Examinations held in 1960 and has, therefore, been awarded the Sir Banister Fletcher Prize.

Mr Holman is 29 years of age, and received his architectural training at the Cheltenham School of Architecture.

Allied Societies

Changes of Officers and Addresses

Berks, Bucks and Oxon Architectural Association. Buckinghamshire Society of Architects. Chairman, J. H. Cox [*A*] (as from 1 July 1961). Hon. Secretary, T. J. Ridley, BA (ARCH) [*A*], 'New Ways', 37 King Edward Avenue, Aylesbury, Bucks (as from 1 July 1961).

Devon and Cornwall Society of Architects. Exeter Branch. Chairman, G. G. G. Saunders [*A*].

Essex, Cambridge and Hertfordshire Society of Architects. Cambridge Chapter. Hon. Secretary, P. M. Cowell, MA [*A*], 'Whitecroft', Haslingfield, Cambs. *Chelmsford and District Chapter.* Chairman, Jack Sorrell [*A*]. *Colchester and District Chapter.* Chairman, J. W. Ellmers [*A*], Flat 1, Holland House, Skelmersdale Road, Clacton-on-Sea, Essex. *Hertfordshire Chapter.* Chairman, G. A. J. Mathers [*A*]. Hon. Secretary, P. D. B. Groves [*A*], 44 Charlotte Street, London, W1. *West Essex Chapter.* Chairman, Frederick Jones [*F*].

Leicestershire and Rutland Society of Architects. President, S. S. Moore [*F*]. Acting Hon. Secretary, Mr Edmund Wilford [*A*] who has been Hon. Secretary of the Society for some time has resigned, but he will be Acting Hon. Secretary until such time as his successor is appointed.

Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects. Huntingdonshire Branch. Chairman, K. G. Dines [*A*]. Hon. Secretary, R. H. W. Baldwin, 12 The Hill, Great Stukeley, Huntingdon.

Nottingham, Derby and Lincoln Society of Architects. President, R. R. Alexander, MTPI [*F*] (as from 1 July 1961).

West Yorkshire Society of Architects. Wakefield Branch. Chairman, J. H. Ashcroft [*A*]. Hon. Secretary, F. D. Linstrum [*A*], 2 Wedgwood Grove, Leeds 8.

Association of Jersey Architects. RIBA members in Jersey have recently formed a Society under the title of the Association of Jersey Architects. The President is Mr R. A. N. Biggar [*A*] and the Hon. Secretary is Mr W. H. Davies [*A*], 10 Hill Street, St Helier, Jersey, to whom any inquiries with regard to membership should be addressed.

Suffolk Association of Architects. RIBA Architecture Bronze Medal. The Suffolk Association of Architects, with the approval of the RIBA, has announced that the Award of the RIBA Bronze Medal for Suffolk shall be made for the period from 1 January 1958 to 31 December 1960. The Award is to be given to a building of exceptional merit erected during these three years and the building (or group of buildings) must be situated in the County of Suffolk.

Assessors who have been appointed to the Jury for this Award are Professor Sir Leslie Martin, MA, PHD [*F*] (RIBA Representative), Sir Francis Meynell (Lay member), Murray S. Hare [*A*] and A. N. Wallis [*A*] (President and Secretary, Suffolk AA) and R. B. Corless, DIP ARCH(Birm) [*A*] (Norfolk and Norwich Association of Architects).

Conditions of the Award and nomination forms may be obtained from the Hon. Secretary, A. E. Wallis [*A*], County Architect's Department, County Hall, Ipswich, Suffolk. Entries must be submitted to the Hon. Secretary by 15 June 1961.

Essex, Cambridge and Hertfordshire Society of Architects. Visit to Paris, 5–8 May 1961. A party of 56 members and wives, led by the President, Mr James Caldwell [*F*], visited Paris, travelling by charter-plane from London Airport. The trip was organised by Mr R. Owen Vine [*F*], a former secretary of the Society and Past Chairman of Hertfordshire Chapter.

The programme included visits to several new buildings, each of which was in some way remarkable. These included the Caisse Centrale, a government office which handles family allowances; the UNESCO building; the headquarters of Saint-Gobain, the glass and chemical firm; and the new exhibition hall at Neuilly.

Time was also found to visit Versailles, to take a river trip on the Seine and for individual activities according to choice. The whole weekend was very enjoyable and reflects great credit on the organisers, whose careful and efficient preparatory work ensured its success.

General Notes

RIBA – The Building Centre: Manufacturers Trade and Technical Literature Competition 1961. The Assessors (Mr George Grenfell Baines [*F*], Mr Bruce Martin [*A*], Mr Roger Walters [*A*], Mr Bryan Westwood [*F*]) in their report say: We are of the opinion that the standard of entry generally is, this year, higher than in former years and that the improvement since the last competition is most marked.

Result

GROUP I

Group Ia. *Certificate of Exceptional Merit.* Alumin Building Components Ltd.
Certificates of Merit. Arco Flooring Ltd., Armstrong Cork Co. Ltd., Leeds Fireclay Co. Ltd., Morris Singer Co. Ltd., Redland Tiles Ltd., Truscon Ltd., Universal Asbestos Manufacturing Co. Ltd.
Honourable Mentions. British Plaster Board (Manf.) Ltd., Courtney Pope (Electrical) Ltd., Hickson's Timber Impregnation Co. (G.B.) Ltd., Marryat and Scott Ltd.
Group Ib. *Certificate of Merit.* Gyproc Products Ltd.
Group Ic. *Certificate of Exceptional Merit.* Falk, Stadelmann and Co. Ltd.
Certificate of Merit. Universal Asbestos Manufacturing Co. Ltd.
Honourable Mentions. Adamsez Ltd., General Electric Co. Ltd.
Group Id. No awards.

GROUP II

Certificates of Merit. Esso Petroleum Co. Ltd., Federation of Coated Macadam Industries, Langley London Ltd., Pilkington Brothers Ltd.

The Staedtler Scholarship for Draughtsmanship. Last-year students of architecture at technical colleges and schools throughout Great Britain can compete for a newly endowed scholarship.

Known as 'The Staedtler Scholarship for Draughtsmanship', with a postgraduate course at a German Technical University as the principal award, the scholarship is sponsored by one of the leading suppliers of drawing pencils.

All fees, together with travelling costs, and board and lodging will be paid. Provision will also be made for language tuition if the successful student is without a working knowledge of German.

The alternative first prize is a cash grant of £250 to assist postgraduate study in Great Britain. There will be a second prize of £100 and a third award of £50.

Awards will be made for the quality of draughtsmanship, combined with the most outstanding design. Students of architecture may submit drawings illustrating the House of the Future, embodying their own imaginative ideas.

Entry forms and full details may be obtained from college and school principals. The drawings can be sent in at any time but must be received not later than Friday 14 July 1961.

RIBA Cricket Club. *RIBA v. The Vitruvians.* The match was played at Elstree on 10 May and resulted in a draw. The RIBA batted first and declared at the respectable total of 177 for seven (A. E. J. Morris 92). The Vitruvians replied with 155 for five (A. Day 79, L. Webb 28). For the RIBA, D. Stevens took 4 for 35.

Notes from the Council Minutes

Meeting held on 9 May 1961

Appointment of RIBA Representatives

(*a*) *Devon and Cornwall Society of Architects; RIBA Architecture Bronze Medal Jury* (1958–60). Mr E. F. Tew [*F*].

(*b*) *Electrical Association for Women; National Advisory Council.* Miss Elizabeth Denby [*Hon. A*] (reappointed for a further year).

Admission to Alliance. *North Wales Society of Architects.* At their meeting in May 1960, in approving the proposals of the Constitutional Committee, the Council gave approval in principle to the separation of the North Wales Architectural Society from the Liverpool Architectural Society, and to its becoming directly allied to the RIBA under such title as might later be agreed.

In accordance with Bye-law 70, the constitution and rules of the Society had to be submitted and approved by the RIBA Council as a preliminary to admission to alliance.

The constitution and rules of the new Society under the title of the North Wales Society of Architects have been prepared in a series of joint consultations between the RIBA secretariat and the Society's Honorary Secretary. The rules being fully in order approval was given to the Society's alliance.

National Illumination Committee. The Honorary Officers of the Technical Standards Committee recommended that the RIBA become a subscribing member of the National Illumination Committee. The annual subscription is £10. The Council approved the Finance Committee's recommendation that this subscription be added to the list approved by the Council on 14 March 1961.

Membership. The following members were elected: as Honorary Corresponding Members 2; as Fellow 1; as Associates 81.
Students. 34 Probationers were elected as Students.

Applications for Reinstatement. The following applications were approved: as Fellow: Arthur Spence Atkinson; as Associates: George Cruickshank, Mrs Helen Betty Ingleby, Mrs Sheila Lasham, Peter Leslie Maynard, Clifford Haigh Paull, John Francis Charlewood Turner.

Obituary. The Secretary reported with regret the death of the following members: Dr Thomas Bodkin [*Hon. A*], Ralph Edward Matthews [*Retd F*], Edward Arthur Verger [*Retd F*], Joseph Fogden [*A*], Eric Cecil Kent [*A*], Charles Joseph Thompson [*A*], Lt-Col. J. Austen Woodgate, OBE [*A*], Frederick Wright [*A*] (Serial No. 8435), William Arthur Goldring [*Retd A*], Lt-Col. Owen Keith Beattie, TD [*L*], Francis Guilford Waddell Dudley [*L*], Edgar Hoenig [*L*], T. E. Bell [*Retd L*].

By resolution of the Council the sympathy and condolences of the Royal Institute have been conveyed to their relatives.

Membership

Resignations. The following resignations were recorded during April 1961: Robert Henri Louis-Charles de Beaumont [*A*], Peter Robert Haigh [*A*] (Vancouver, Canada), Peter Jameson [*A*] (Cross-in-Hand), Roger John Egerton Leigh [*A*] (Penzance), Bernard Edward Elliott Wiehahn [*A*] (Watford), John Pain Clark [*Retd A*] (Lowestoft), James Fulton Ford [*L*] (Edinburgh), Herbert Rhodes [*L*] (Manchester).

Transfers to Retired Membership. The following members were transferred to Retired Membership during April 1961: as Retired Fellows: Samuel Bertram Pritlove (Richmond, Surrey), Hugh Gordon Stanham, TD (Rogate), John Swarbrick (Cheam). As Retired Associates: Lindsey Alexander Thompson Webster Drake, Eric Charles Randle Page (Blackburn), Robert Parker, MC (Windermere). As Retired Licentiate: George Helson (Cullompton).

Membership Lists

ELECTION: 9 MAY 1961

The following candidates for membership were elected on 9 May 1961.

AS HONORARY CORRESPONDING MEMBERS (2)

May: Professor Dr Ernst, Hamburg, Germany.
Tschumi: Jean, Lausanne, Switzerland.

AS ASSOCIATES (81)

Agyeman: Osei Tutu, Accra, Ghana.
Ahmad: Zahani Bin, Dipl.Arch.(Oxford), Petaling Jaya, Malaya.
Arnott: Peter James, Johannesburg, South Africa.
Barnes: Roy Frederick Morton, Karachi, West Pakistan.
Baxter: Royce Woolloton, Burwash.
Bowry: Francis James, D Arch.(Kingston), New Malden.
Campbell: James Stewart, D A(Dundee), Leven, Fife.
Cantwell: John Keith, A ADipl.
Chatterjee: Himadri Prosad, B A(Arch.)(Sheffield), Sheffield.
Clinton: Michael Napier, B Arch.(CT), Salisbury, S. Rhodesia.
Collings: Michael Roseveare, M A(Cantab.), Huntingdon.
Cooper: Rodney Edward, B Arch.(Natal), Bulawayo, S. Rhodesia.
Cornell: (Miss) Rosemary Ann, Dip.Arch. (Southend), Leigh on Sea.
Cowen: John Philip, B Arch.(Rand), Johannesburg, South Africa.
Critchlow: (Mrs) Margaret Jenifer, Dip.Arch. (Sheffield).
Critchlow: Rex Stafford, Dip.Arch.(Sheffield).
Dadachanji: Viraf Pirojsha, Bombay, India.
Davenall: William Wesson, Dip.Arch.(Birm), Birmingham.
Doctor: Jimmy Framroze, B I D(Manitoba), Bombay, India.
Donaldson: Ian Travis, A ADipl.
Dongre: Umakant Waman, B Sc.(Bombay), Poona, India.
Edwards: Norman John, B Arch.(Sydney), M Arch.(Mass.Inst.Tech.).
Farrow: Brian Verrall, Dip.Arch.(The Polytechnic), Chislehurst.
Fisher: James Robert Brooks, Dip.Arch. (R W A), Winchester.
Fisher: Peter Wells, Dip.Arch.(Manchester), Newcastle, Staffs.
Foster: John Martin, Dip.Arch.(Sheffield), Sheffield.
Fourie: Stanley, B Arch.(Rand), Johannesburg, South Africa.
Ganesen: Karthigasoe, Colombo, Ceylon.
Gibson: Thomas Stephen Davidson, Dip.Arch. (Abdn), Aberdeen.
Gilmore: David Lawrence Crofton, Dip.Arch. (Birm), Ithaca, New York, USA.
Goh: Hock Guan, B Arch.(Melbourne), Melbourne, Australia.
Gradon: Martin Thompson Moffatt, Dip.Arch. (R W A), Dartmouth.
Greenall: Alan, B A(Arch.)(Manchester), Gateshead.
Grinyer: Dennis Thorneycroft, Worthing.
Hadden: Anthony Laurence, Kettering.
Heddle: George Malcolm, Dip.Arch.(Abdn), Aberdeen.
Heksel: Jan Ryzowski, Godalming.
Highfield: Michael Henry, Dip.Arch.(Nottm), Gloucester.
Howrie: Anthony James B A(Arch.)(Sheffield), Buckhurst Hill.
Jenkins: Ceri Rees, B Arch.(Wales), Coventry.
Jofriet: (Mrs) Marlene J., Toronto, Ontario, Canada.
Jones: Gordon Alfred, Beirut, Lebanon.
Jones: Herbert Martyn, Dip.Arch.(Wales), Blaina, Mon.
Jozefowicz Wilde: Stefan T.
Kapadia: Kersi, Bombay, India.
Kilberger: Harry, Dip.Arch.(Hobart, Tasmania), Launceston, Tasmania, Australia.
Kwong: Pak Chu, Hong Kong.
Leach: Christopher William, Dipl.Arch. (Leeds), York.
Lewis: David Gareth, Dip.Arch.(Cardiff), Neath.
Lim: David Joo Khoon, A ADipl., Kuching, Sarawak.
Lindsay: Alan Johnston, D A(Dundee), Dundee.

Low: Alan Malcolm, Dipl.Arch.(Oxford), Freeland.
McDonald: Hector, Dip.Arch.(Abdn), Harlow.
McFadzean: Kenneth Douglas, B Sc.(Arch.) (Glasgow), Whitecraigs.
Mackay-Lewis: Jeremy James, BArch. (L'pool).
Madeley: Victor Edward, Dip.Arch.(Sheffield), Newcastle-under-Lyme.
Malkan: Jayantkumar Chaturbhuj, Bombay, India.
Martin: Alexander Crichton, B A(Arch.)(Manchester), Stockport.
Mhatre: Vidyadhar Gajanan, Bombay, India.
Morrison: Alexander, Kettering.
Ogunbamwo: Folorunso, Dip.Arch.(Manchester), Manchester.
Parker: Frederick Thomas, Dip.Arch.(Birm), Coventry.
Paterson: James Mason, D A(Glas.), Glasgow.
Pittaway: John Kenneth, Dip.Arch.(Birm), Birmingham.
Pradhan: Rameschandra Mahadeo, New Delhi, India.
Price-Hughes: Glynn, B Arch.(Pretoria), Pretoria, South Africa.
Ramsay: Sydney Greig, Dip.Arch.(Abdn), Montrose.
Rowen: (Miss) Eileen, Dip.Arch.(Leics.), Market Harborough.
Smith: Michael Ian Montague, M C D, B.Arch. (L'pool).
Storr: Charles Andrew, Dipl.Arch.(Hull), Dip. C D(L'pool), Liverpool.
Tan: Beng Kiat, B Arch.(Melbourne), Singapore.
Taylor: Joseph Eric, B Arch.(L'pool), Manchester.
Thomas: Victor Clifford, B Arch.(CT), Salisbury, S. Rhodesia.
Thomas: William Clive Benjamin, Dip.Arch. (Wales), Ammanford.
Toh: Kheng Hoon, B Arch.(L'pool), Penang. Malaya.
Tooms: Patrick Telfer, Canterbury.
Watchorn: Barrie, Nottingham.
Watson: John Malcolm, B A(Arch.)(Manchester), Bury.
Will: Ian Martin, D A(Glas.), Glasgow.
Willis: Alan James, D A(Edin.), Edinburgh.
Woods: Robert, Dip.Arch.(The Polytechnic), Belfast.

ELECTION: 27 JUNE 1961

An election of candidates for membership will take place on 27 June 1961. The names and addresses of the candidates found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, RIBA, not later than Friday 16 June 1961.

The names following the applicant's address are those of his proposers.

AS HONORARY CORRESPONDING MEMBERS (4)

Laprade: Albert, Membre de L'Institut, Architecte en chef des Palais Nationaux; inspecteur-general hon. des Beaux-Arts, 27 Rue Thomond, Paris Vème, France. Proposed by the Council.

Makiya: Mohamed Saleh, B Arch.(L'pool), Ph.D.(Cantab.), Baghdad, Iraq. Proposed by the Council.

Mardones-Restat: Professor Hector, President of the International Union of Architects, Director of the Institute of Housing and Town and Regional Planning, University of Chile, Former Dean of the Faculty of Architecture, Former Counsellor of the Chilean Architects' Association, Malaga 316, Las Condes, Santiago de Chile. Proposed by the Council.

Ting-pao: Professor Yang, Vice-President of the International Union of Architects. 104 Cheng Hsien Street, Nanking, China. Proposed by the Council.

AS FELLOWS (11)

Beddington: (Miss) Nadine Dagmar, 301–307 Oxford Street, W1. C. St C. Oakes, Leonard C. Howitt, P. H. P. Bennett.

Gibberd: Harry, 180 Corporation Street, Birmingham 4. A. G. Sheppard Fidler, Cecil E. M. Fillmore, Herbert Jackson.

Jenkinson: John Mark Mansell, M A, 53 Wilkinson Street, Sheffield 10. Prof. John Needham, J. Lewis Womersley, J. Mc D. Fairweather.

Makins: Thomas Kenneth, 23 High Street, Portsmouth, Hants. A. C. Townsend, John V. Nisbet, R. L. Reynish.

Merer: Stanley Peter Charles, Dipl.Arch. (Northern Polytechnic), Coombe Court, Butlers Cross, Aylesbury, Bucks. T. A. L. Concannon, T. P. Bolton, Raymond C. White.

Richardson: Kenneth French, 97 Longmore Avenue, New Barnet, Herts. Digby L. Solomon, Sidney Kaye, E. H. Firmin.

Tietjen: Edward Horace, 96 Woodford Avenue, Ilford, Essex. Digby L. Solomon, Sidney Kaye, E. H. Firmin.

and the following Licentiates who are qualified under Section IV, Clause 4(*c*) (ii) of the Supplemental Charter of 1925:

Brown: Eric Ernest, Department of Architecture, School of Art, Kingston-upon-Thames, Surrey. Eric Lyons, E. Maxwell Fry, Edward D. Mills.

Hill: William Archibald, F R I C S, 4 Queen Victoria Street, EC4. Digby L. Solomon, Sidney Kaye, R. J. Harriman.

Paget: Paul Howard, 41 Cloth Fair, EC1. Lord Mottistone, Sir Basil Spence, Sir Hugh Casson.

Sharp: Thomas, C B E, M A, D.Litt.(Dunelm), P P T P I, P P I L A, 84 York Mansions, Prince of Wales Drive, SW11. J. H. Forshaw, David Booth, David Roberts.

AS ASSOCIATES (189)

Andrew: Edwin Philip, 61 Hague Street, Glossop, Derbyshire. Cecil Stewart, Eric S. Benson, G. S. Hay.

Andrews: Davis Alun Paul, B.Arch.(L'pool), 4 Heol-y-Felyn, Goodwick, Pembrokeshire. Prof. R. Gardner-Medwin, Sir Basil Spence, Andrew Renton.

Attfield: Raymond Irving, Dipl.Arch.(Northern Polytechnic), 18 Kenning Road, Hoddesdon, Herts. Prof. Richard Llewelyn Davies, C. G. Bath, S. F. Burley.

Bannister: William Geoffrey, 21 Pound Place, SE9. James F. Howes, P. H. P. Bennett, Morris L. Winslade.

Baron: Geoffrey, 50 Lytham Road, Rugby, Warwickshire. Applying for nomination by the Council under Bye-law 3(*d*).

Barrett: Michael Vernon, 20 Argyle Road, Ilford, Essex. Lord Mottistone, K. J. H. Seymour, A. V. Elliott.

Barron: Thomas, B Arch.(L'pool), 7 Dunster Drive, Sully, near Cardiff. Prof. R. Gardner-Medwin, H. H. Powell, R. R. Young.

Beattie: Alan Scott, B Arch.(Wales), 33 Badminton Grove, Ebbw Vale, Monmouthshire. Lewis John, E. Maxwell Fry, J. W. A. Cubitt.

Bedford: Horace Trevor, 21 Dean Street, Liskeard, Cornwall. Applying for nomination by the Council under Bye-law 3(*d*).

Benjamin: William Hugh, 94 Oxford Gardens, W10. Paul Nightingale, Dr R. Herz, Arthur Korn.

Bennett: Christopher John, 33 Denmark Road, Gloucester. T. H. B. Burrough and applying for nomination by the Council under Bye-law 3(*d*).

Benstead: John Dennis, 863 Brighton Road, Purley, Surrey. L. L. Lipski, Stanley G. Soper, A. E. Henson.

Berridge: Denis William, 40 St John Street, Oxford. David Booth, Reginald Cave, Thomas Rayson.

Bevan: Thomas Lewis, Dip.Arch.(Wales), 58 Highfields, Preston Street, Shrewsbury. Lewis John, Sir Percy Thomas, C. F. Jones.

Bevis: John Drysdale, Flat B, 6 Hopton Road, Streatham, SW16. Harry Moncrieff, John S. Walkden, Gerard Brigden.

Black: John Herbert, 32 Tunnacliffe Road, Newsome, Huddersfield. Frank Chippindale, Frederick Gibberd, Kenneth Turner.

Blair: Dennis George, 20 Park View Road, NW10. Norman Keep, James Melvin, E. S. W. Atherton.

Blenkin: John, 20 Dovehouse Croft, Harlow, Essex. Paul Nightingale, Arthur Korn, Edwin Rice.

Bolton: James Alan, Dip.Arch.(Dunelm), Ware Lodge, Woodhall Park, Ware, Herts. Prof. J. H. Napper, H. Wharfe, Bruce Allsopp.

Bond: Peter Allen, 19 Hornbeam Road, Theydon Bois, Epping, Essex. Raglan Squire, G. J. Cuzens, Harold Mileson.

Bone: Sylvester Francis, B A(Cantab.), A A Dipl., 94B Regents Park Road, NW1. Applying for nomination by the Council under Bye-law 3(*d*).

Brand: Anthony Graham, Dipl.Arch.(U C L), 'Woodlands', Chaldon, Surrey. R. C. White-Cooper, Arthur M. Foyle, Charles W. J. Smeed.

Breton: Frederick Brian, 100 South Parade, Pudsey, Yorks. G. Davy, Norman H. Fowler, Noel Pyman.

Brockwell: John Arthur Cecil, 25A Stilehall Gardens, Chiswick, W4. Paul Nightingale, Arthur Korn, Edwin Rice.

Brunskill: Alan, Flat 59, Kent Road, Newton, Chester. Cecil Stewart, R. E. E. Beswick, A. D. Kirby.

Bryan: John Dawson, Dipl.Arch.(Northern Polytechnic), 14 Marske Mill Lane, Saltburn-by-the-Sea, Yorks. Ronald Cowan, C. G. Bath, S. F. Burley.

Burley: Paul Nicholas, Dip.Arch.(Birm), 30 Fallowfield Road, Orchard Hills, Walsall, Staffs. R. G. Madeley, F. W. B. Charles, R. Edmonds.

Butler: John Sherburne, 91 Catlow Hall Street, Oswaldtwistle, Accrington, Lancs. D. C. Townsend, Frank Bradley, Cecil Stewart.

Cameron: Richard William Grant, D A (Edin.), 119 Willowbrae Road, Edinburgh 8. Applying for nomination by the Council under Bye-law 3(*d*).

Cannings: Hugh, Dipl.Arch.(Canterbury), Ulcombe Post Office, near Maidstone, Kent. Andrew Renton and applying for nomination by the Council under Bye-law 3(*d*).

Carswell: Adrian Antony Nicholas, M A, D A(Edin.), 43 Mansion House Road, Edinburgh 9. D. E. E. Gibson, L. G. Pargiter, R. Graybell.

Chaffer: (Mrs) Heather Grace, B A(Cantab.), March, Hoe Court, North Lancing, Sussex. Peter Bicknell, Prof. Sir Leslie Martin, David Roberts.

Cohen: Norman, Dipl.Arch.(Northern Polytechnic), 11 Ashbourne Avenue, NW11. C. G. Bath, S. F. Burley, J. E. Moore.

Collins: Paul Herbert, Dip.Arch.(Sheffield), Round Lodge, Muston, near Filey, Yorks. Charles R. Thorp, Prof. John Needham, H. B. Leighton.

Comrie: (Miss) Elizabeth Mary, Dipl.Arch. (U C L), 3 Gallows Hill, Kings Langley, Herts. R. C. White Cooper, H. F. Hoar, Charles W. J. Smeed.

Crouch: John Denis, 2 Geneva Road, Kingston-upon-Thames, Surrey. Eric A. W. Ixer, S. P. Anderson, Frederick Barber.

Cuthbert: Ernest William, 13 Farm Way, Buckhurst Hill, Essex. C. G. Bath, Miss J. E. Townsend, Frederick Jones.

Danks: Alan Leslie, Dip.Arch.(Birm), 29 Milverton Road, Knowle, Solihull, Warwicks. Reginald Edmonds, J. F. R. Gooding, F. W. B. Charles.

Delaney: James Bernard, B Arch.(NUI, Dublin), 22 Haddon Road, Clontarf, Dublin, Ireland. Vincent Kelly, W. A. Maguire, Wilfred Cantwell.

Dickson: Graham Wilson, M C D, B Arch. (L'pool), A M T P I, 65 Addison Road, W14. Prof. R. Gardner-Medwin, Prof. H. Myles Wright, D. L. Bridgwater.

Dixon: Colm Brian, 22 Lr. Baggot Street, Dublin. John J. Robinson, Vincent Kelly, W. A. Maguire.

Dixon: Michael Ernest, 'Fernleigh', St Ann's Chapel, Guinnislake, Cornwall. R. Mountford Pigott, C. G. Bath, J. E. Moore.

Dryden-Brownlee: John, 'Hillworth', 10 Burrill Avenue, E. Cosham, Portsmouth, Hants. A. C. Townsend, Frank Mellor, John V. Quarmby.

Duncan: David Graham Bruce, D A(Edin.), 26 Colinton Mains Road, Edinburgh 13. Applying for nomination by the Council under Bye-law 3(*d*).

Eaves: Peter John, 14 Seed Field Croft, Cheylesmore, Coventry. Holland W. Hobbiss, M. A. H. Hobiss, Richard G. Cox.

Elson: Graham Michael David, Dip.Arch. (Sheffield), Dore Cottage, Shrogswood Road, Sitwell Park, Rotherham. Prof. John Needham, J. Lewis Womersley, W. L. Clunie.

Evans: John Rheinallt, Dip.Arch.(Wales), 3 North Road, Aberaeron, Cardiganshire. Lewis John, Chessor Matthew, Sir Basil Spence.

Evans: Sidney Frederick, 224 Salisbury Avenue, Barking, Essex. L. D. Tomlinson, C. G. Bath, Frederick Jones.

Farmer: John, Dip.Arch.(The Polytechnic), 269A Stockingstone Road, Luton, Beds. John S. Walkden, Peter B. Dunham, F. M. Widdup.

Farmer: Michael John, 22 St John's Square, Wakefield, Yorks. J. R. Sheridan-Shedden, F. Chippindale, A. W. Glover.

Firth: Kenneth, 169 Huddersfield Road,

Halifax, Yorks. K. Turner, C. Sunderland, Norman Culley.

Forrester: Donald, 2 Atholl Place, Shawhead, Coatbridge, Lanarkshire. A. G. Henderson, W. J. B. Wright, Walter Underwood.

Freedman: Aubrey, Dipl.Arch.(Northern Polytechnic), 56 Colvestone Crescent, Dalston, E8. Sidney Kaye, E. H. Firmin, C. G. Bath.

Freel: Douglas Munro, DA(Dundee), 31 Greendykes Road, Craigiebank, Dundee. Chessor Matthew, T. H. Thoms, W. S. Gauldie.

Fuller: Raymond Charles, 36 Elsworthy, East Molesey, Surrey. Donald Gibson, Leonard G. Pargiter, L. Robert Bradshaw.

Galbraith: William, Ard-Na-Greine, Craigantlet, Dundonald, Co. Down, N. Ireland. J. H. Swann, D. A. Shanks, Val Smyth.

Geden: Roy Anthony, 6 Honiton Road, Wyken, Coventry, Warwickshire. Douglas J. Oliver, R. Hellberg, Maurice Harris.

Georghiades: George, Dipl.Arch.(Northern Polytechnic), 50 Victoria Rise, Clapham Common, SW4. C. G. Bath, J. E. Moore, S. F. Burley.

Geraghty: Robin Cedric, B Arch.(Natal), c/o Messrs Thomas Mitchell and Partners, 20 Bedford Square, WC1. G. H. Crickmay, Frederic W. Powers and applying for nomination by the Council under Bye-law 3(*d*).

Gillham: Gerald Burgoyne, 12 Edinburgh Drive, Ickenham, Middlesex. Dr R. Herz, David Du R. Aberdeen, Paul Nightingale.

Graebe: David, 'Inadown', 7 Pashley Road, Eastbourne, Sussex. K. E. Black, David Clarke, H. Hubbard Ford.

Green: Frank Gerald John, 19 Ashburton Road, Addiscombe, Surrey. W. Stanley Hattrell, F. H. Adie, Donald H. McMorran.

Green: Ronald Walter, Dipl.Arch.(Northern Polytechnic), 57 Willingale Road, Loughton, Essex. Vincent Burr, C. G. Bath, S. F. Burley.

Grinsell: John Michael, MA(Cantab.), 30 Links Road, Cullercoats, Northumberland. Prof. J. H. Napper, H. Wharfe, Bruce Allsopp.

Grossman: Kazimierz Wladyslaw, 13 Cambrian Close, West Norwood, SE27. T. S. Barnes and applying for nomination by the Council under Bye-law 3(*d*).

Grove-Stephenson: John Christian, 15 Southend, Ledbury, Herefordshire. D. W. Dickenson, W. Usher and applying for nomination by the Council under Bye-law 3(*d*).

Gynn: Sidney Thomas, 312 West Princes Street, Glasgow, C4. F. R. Wylie, George F. Shanks, William McCrea.

Hall: Robert David, c/o J. C. M. Williams, Esq., Station Buildings, Altrincham, Cheshire. P. G. Fairhurst, Berkeley L. Moir, David Booth.

Hannah: George, 114 Kingsbridge Road, Morden, Surrey. S. G. Lawrence, F. G. West, Edwin Williams.

Hawksworth: Richard, 32 Reinwood Avenue, Fearnville, Leeds 8. Evan E. Morgan, J. L. Crowther, F. L. Charlton.

Hayman: Peter John, 5 Wellington House, The Farmlands, Northolt, Middlesex. Denis Poulton, Philip G. Freeman, C. A. Roger Norton.

Henney: Thomas, DA(Edin.), 16 Lindsay Road, Edinburgh 6. Peter S. Ferguson, J. H. Glover, J. Roy McKee.

Hetherington: Francis St John, Dip.Arch.(Birm), 9 St Paul's Road, Colchester, Essex. F. W. B. Charles, Harold Conolly, J. F. R. Gooding.

Hills: Nicholas Roger, 26 Parsonage Road, Eastbourne, Sussex. Neville Conder, Sir Hugh Casson, John Wright.

Hitch: William Anthony, 18 Fairview Rise, Westdene, Brighton 5, Sussex. H. Fitzroy Robinson, William J. Thrasher, K. E. Black.

Hodges: Thomas Keith, 113 Orchard Croft, Mark Hall, Harlow, Essex. Frederick Gibberd, Geoffrey A. Crockett, A. E. Kelsey.

Honer: Peter Walter, 65 Burdon Lane, Cheam, Surrey. Peter Chamberlin and applying for nomination by the Council under Bye-law 3(*d*).

Hooper: John Clifford Walter, 21 Meliden Road, Penarth, Glamorgan. D. Garbutt Walton, John T. Darch, Gordon H. Griffiths.

Hope: (Miss) Beryl Mary, 36A Elizabeth Street, SW1. F. R. S. Yorke, Eugene E. Rosenberg, C. G. Bath.

Hornby: John Brian, Dipl.Arch.(Northern Polytechnic), 57 Ridgway Place, SW19. Sir Hugh Casson, Neville Conder, Eric Lyons.

Howarth: Benjamin Peter, 4 Oak Avenue, Chorlton-cum-Hardy, Manchester 21. Prof. R. A. Cordingley, Eric S. Benson, C. W. Quysner.

Howell: William Lynton, 19 Gelliwastad Road, Pontypridd, Glamorgan. Trevor Hill, G. H. Griffiths, Howard Williams.

Hughes: Peter Graham, AADipl., 'Gwylfa', Gilfach Road, Tonypandy, Glam. Arthur Korn, M. Pattrick, Anthony Cox.

Hunt: Brian Raymond, AADipl., 95 Barlows Lane, Andover, Hants. M. Pattrick, Arthur Korn, Anthony Cox.

Jackson: Alan, 310 Killinghall Road, Undercliffe, Bradford. Evan E. Morgan, W. F. Morgan, J. L. Crowther.

Jones: Edward Leslie, Dip.Arch.(Birm), 11 Primley Avenue, Parkbrook, Walsall. F. W. B. Charles, G. Alan G. Miller, Reginald Edmonds.

Jones: Frank, 21 Alexandra Road, Walkden, Lancashire. Frank Bradley, Robert M. McNaught, D. Wynne Thomas.

Jones: Ronald Charles Lester, 4A Corndon Crescent, Sundorne, Shrewsbury, Shropshire. Douglas Hall, C. W. McIntosh, H. Anthony Clark.

Kay: Bryan, Verandah House, St Helens Road, Leigh, Lancs. Ernest Prestwich, Robert M. McNaught, Frank Bradley.

Kennedy: David Kenneth, 46 Seymour Place, W1. E. B. Musman, D. Nightingale, A. C. Townsend.

Kennett: John Albert, Dip.Arch.(The Polytechnic), 19 Prince's Avenue, N10. Sir Basil Spence, Andrew Renton, K. W. Farms.

King: David Eric, 44 Fassett Road, Kingston-upon-Thames, Surrey. L. G. Pargiter, L. Robert Bradshaw, George Fairweather.

Klavins: Zigurds, 64 Exmouth Place, Bradford 3, Yorks. E. D. Jordan, Eric Morley, W. C. Brown.

Lammin: Anthony Joseph, Dip.Arch.(The Polytechnic), 23 Gate Hill Court, Notting Hill Gate, W11. F. T. Orman, J. S. Foster, John S. Walkden.

Lamprell: Brian, Dip.Arch.(Birm), 309 Blossomfield Road, Solihull, Warwickshire. C. K. Capon, Anthony Cox, Leo De Syllas.

Le Fevre: (Mrs) Joanna Mary, AADipl., 37A Lansdown Road, W11. D. L. Bridgwater, Peter Shepheard, Michael Pattrick.

Leitch: Anthony William, AADipl., 23 Ridgmount Street, WC1. Leslie G. Creed, Arthur Korn, J. M. Austin-Smith.

Loban: Conrad Maurice, 59 Mill View Road, Tring, Herts. Clifford Culpin and applying for nomination by the Council under Bye-law 3(*d*).

Long: Raymond Walter, 47 Oaklands Avenue, Thornton Heath, Surrey. N. E. Morley, R. C. White-Cooper, M. Sanders.

Longfield: Michael Benjamin Kenard, 15 Pendyffryn Road, Rhyl, Flintshire, N. Wales. S. Colwyn Foulkes, B. Hallwood Lingard, J. Alan Haddy.

Lowe: Peter Frederic, 20 Linton Street, Islington, N1. Applying for nomination by the Council under Bye-law 3(*d*).

McCardle: Peter Henry James, Dip.Arch.(Manchester), Sefton, 15 Delahays Road, Hale, Cheshire. Prof. R. A. Cordingley, Francis Jones and applying for nomination by the Council under Bye-law 3(*d*).

McCarthy: Owen Patrick, B Arch.(NUI Dublin), Rathbern, Lee Road, Cork. W. A. Maguire and applying for nomination by the Council under Bye-law 3(*d*).

MacGregor: Alexander G., DA(Edin.), 32 Dundonald Road, Gallowhill. Paisley. Applying for nomination by the Council under Bye-law 3(*d*).

Macie: Bronislaw Ludwik, 11 Dennington Park Road, NW6. Clifford Culpin, Peter L. Hansen Bay, Peter Dunham.

Mahoney: William Edward, Dip.Arch.(The Polytechnic), 47 Wentworth Road, NW11. Ronald Fielding, J. S. Foster, John S. Walkden.

Manger: Carl Edmund, Dip.Arch.(Leics.), 99 Repton Street, Leicester. R. J. Howrie, S. Penn-Smith, J. H. Lloyd Owen.

Mansell: John Sanford, Dip.Arch.(Birm), 19 Dudley Road, Tipton, Staffs. R. G. Madeley, F. W. B. Charles, Reginald Edmonds.

Marriott: Philip, Dip.Arch.(Hammersmith), 5 Chamberlain Street, NW1. Louis de Soissons, D. M. Hodges, Kenneth Peacock.

Marshall: Thomas Desmond, 113 Marlborough Park Central, Belfast 9, N. Ireland. P. Brian Gregory, Val Smyth, Benjamin Cowser.

Martin: Brian Roland, Dip.Arch.(Manchester), 'Castle View', 344 Lower Broughton Road, Broughton, Salford 7, Lancs. Prof. R. A. Cordingley, Eric S. Benson, George Robb.

Martin: William, B.Arch.(NUI Dublin), 49 Trent Road, SW2. P. Hickey, H. St John Harrison, Mrs Gillian Harrison.

Michaelides: Andreas Michael, Dipl.Arch.(Northern Polytechnic), 8 Holmdene Avenue, SE24. C. G. Bath, S. F. Burley, Frederick Jones.

Mills: Peter Ramsay, DA(Dundee), c/o Herbert G. West, Esq., Saltoun Chambers, 19 Seaforth Street, Fraserburgh, Aberdeenshire. W. S. Gauldie, A. F. S. Wright, Chessor Matthew.

Mims: Robert Hindle, 123 Langley Way, West Wickham, Kent. Norman Royce, H. Norman Haines, Charles Sykes.

Minett: Michael John, Dip.Arch.(Manchester), 148A Burton Road, West Didsbury, Manchester 20. Prof. R. A. Cordingley, Emil C. Scherrer, J. Kenneth Hicks.

Mitchelson: Alan Stuart, DA(Edin.), 8 Douglas Crescent, Edinburgh. J. Holt and applying for nomination by the Council under Bye-law 3(*d*).

Morris: Frank William, 33 Park Avenue, Sandymount, Dublin. D. A. Shanks, E. D. Taylor, R. H. Gibson.

Morris: George Michael, 'Arden Mhor', Catlins Lane, Eastcote, Middx. Paul Nightingale, H. G. Huckle, Dr R. Herz.

Murchie: Peter, DA(Dundee), 49 St Andrew's Road, Ardrossan, Ayrshire, Scotland. Chessor Matthew, W. S. Gauldie, A. F. S. Wright.

Murnaghan: Alan Michael, Belle Vue, Omagh, Co. Tyrone, N. Ireland. Applying for nomination by the Council under Bye-law 3(*d*).

Murphy: James Brendan Peter, B.Arch.(NUI Dublin), Dip.TP(Lond.), 35 Collingham Road, SW5. Applying for nomination by the Council under Bye-law 3(*d*).

Mutiso: David Muoka, BA(Arch.)(Sheffield), 86 Ashdell Road, Sheffield 10. Prof. John Needham, J. Lewis Womersley, H. B. Leighton.

Nellis: Philip, 17 Braunton Avenue, Weeping Cross, Stafford. Applying for nomination by the Council under Bye-law 3(*d*).

Neufeld: Stephan Max, Dip.Arch.(The Polytechnic), 40 Berners Street, W1. A. R. Borrett, Edwin Williams, F. G. West.

Newson: Harold Clive, Dipl.Arch.(Northern Polytechnic), 21 Thornsbeach Road, Catford, SE6. C. G. Bath, S. F. Burley, J. E. Moore.

Nicholson: William James, DA(Edin.), 2 Grove Street, Edinburgh 3. Applying for nomination by the Council under Bye-law 3(*d*).

Nightingale: Norman, 133 Hardy Mill Road, Harwood, near Bolton, Lancs. Cecil Stewart, Frank Bradley, Robert M. McNaught.

Page: Roy Cornelius, Cherry Lawn, Windsor Road, Radyr, Cardiff, Glam. Sir Percy Thomas, Charles W. Box, Howard Williams.

Palmer: John Henry, 19 Campbell Close, Twickenham, Middx. R. Seifert, Dr R. Herz, Alexander Flinder.

Parkinson: Cyril, 14 Rushyfield Crescent, Romiley, Cheshire. Cecil Stewart, Leonard C. Howitt, Eric S. Benson.

Parsons: Ian Roger, 60 Halesleigh Road, Bridgwater, Somerset. Louis G. Steer, Clement G. Toy, R. Maurice Hewlett.

Pearlman: Wolf Wolfgang, 75 Nevile Road, Salford 7, Lancs. Cecil Stewart, G. Grenfell Baines, Eric S. Benson.

Phillpott: Albert George, 99 Widmore Road, Bromley, Kent. Applying for nomination by the Council under Bye-law 3(*d*).

Pipe: Michael Wilgress Minty, AADipl., 8 Queen Street, Cheapside, EC4. B. W. Turnbull, J. Ardern Powell, J. R. Moore Simpson.

Powell: Brian Edward, 38 Tower Hill, Brentwood, Essex. J. M. Scott and applying for nomination by the Council under Bye-law 3(*d*).

Pring: Kenneth, Dipl.Arch.(Northern Polytechnic), 75 St Asaph Road, Brockley, SE4. C. G. Bath, S. F. Burley, Frederick Jones.

Proctor: Kenneth William, 1A Holywell Street, Chesterfield, Derbyshire. Prof. Stephen Welsh, H. B. Leighton, Clifford Bond.

Puffahl: Mieczyslaw Antoni, 31 Woodlands Gardens, Isleworth, Middlesex. Arthur Korn, Dr R. Herz, Cyril Mardall.

Quek: Kiok Boo, Dipl.Arch.(Northern Polytechnic), 62 Dyne Road, NW6. C. G. Bath, J. E. Moore, S. F. Burley.

Quilter: Edward Clifton, 11 Hermitage Woods Crescent, St Johns, Woking, Surrey. Stanley P. Anderson, B. H. Peake, George Coles.

Rainford: Christopher James, Dip.Arch.(Dunelm), 14 Dene Grove, Gosforth, Newcastle upon Tyne. Bruce Allsopp, Prof. J. H. Napper, H. Wharfe.

Randelia: Dara Hirjibhoy, Dipl.Arch.(Northern Polytechnic), 56 Barn Hill, Wembley Park, Middlesex. C. G. Bath, S. F. Burley, J. E. Moore.

Rawson: Keith John, 41 Rayner Road, Brighouse, Yorks. A. W. Glover, E. Austen Johnson, Norman Culley.

Rhodes: Gerald Ernest, Dip.Arch.(Manchester), 11 Albert Road, Heaton Moor, Stockport, Cheshire. Prof. R. A. Cordingley, Eric S. Benson, P. G. Fairhurst.

Roberts: John Benson, Dip.Arch.(Wales), 39 Merthyr Mawr Road, Bridgend, Glam. Lewis John, H. W. Fletcher, James Melvin.

Roberts: Jon Gerald, Flat 1, Bury Knowle House, Headington, Oxford. Reginald Cave, K. A. Stevens, E. G. Chandler.

Roger: Robin Daryl Wood, Dip.Arch. (RWA), The Close, Boscombe Village, near Salisbury, Wiltshire. S. Elgar, R. W. H. Vallis, J. H. Jacob.

Roseberg: Michael Andre, 49 Endlesham Road, SW12. Peter L. Cocke, Anthony Cox, C. K. Capon.

Rushton: Basil James, 2 Cleveland Court, Cleveland Street, W1. Kenneth A. Lloyd, Herbert Jackson, Reginald Edmonds.

Sergeant: Robert Heckford, 270 The Hornbeams, Harlow, Essex. Norman Culley, F. Chippindale, Kenneth Turner.

Shaw: Ronald Geoffrey, 26 Thornhill Croft, Walton, Wakefield, Yorks. A. W. Glover, Norman Culley, E. Firth.

Shepherd: John Anthony, 5 Albert Road, Ealing, W5. Edwin Rice, Paul Nightingale, George Whitby.

Shirgaonkar: Murleedhar Duttatray, c/o Mr N. C. Banerjee, 6 Roseford Gardens, Shepherds Bush, W12. Paul Nightingale, Dr R. Herz, Arthur Korn.

Shobbrook: Peter George, 20 Acres Lane, Upton Heath, Chester, Cheshire. J. Alan Haddy, Arthur C. Bennett, F. H. Brown.

Shone: Kenneth, Dip.Arch.(Leics.), 5 Sherwood Street, Barnsley, Yorks. Robert Howrie, T. W. Haird, A. E. Eberlin.

Simpson: Douglas, 112 Albert Road, Retford, Notts. N. Summers, C. St C. Oakes, J. W. M. Dudding.

Sims: John Guilliford, Banecote Main Road, Sutterton, near Boston, Lincs. A. C. Townsend, J. W. H. Barnes, L. D. Tomlinson.

Skinner: William Edward Alfred, 45 Frankland Road, Chingford, E4. Hubert Bennett, K. L. Sharpe, Edwin Williams.

Smallbone: (Miss) Mary Anne, 'Grangeside', Ribchester Road, Clayton-le-Dale, Blackburn, Lancs. George Grenfell Baines, D. C. Townsend, Graeme I. C. Highet.

Smith: John Greaves, Dip.Arch.(Birm), 72 Gibbins Road, Selly Oak, Birmingham 29. F. W. B. Charles, Reginald Edmonds, J. F. R. Gooding.

Smith: Raymond, 25 Regent Road, Hanley, Stoke-on-Trent, Staffs. J. R. Piggott, W. Bernard Oldacre, Donald C. Campbell.

Stewart: Colin Hogg, DA(Edin.), 31 Hawthornbank Road, Haddington, East Lothian. Esme Gordon, W. G. Day and applying for nomination by the Council under Bye-law 3(*d*).

Stoney: Ormonde Robert Arthur, Killybegs, London Road, Twyford, Berks. F. F. Doyle, Paul Nightingale, Dr R. Herz.

Sturley: Clive Herbert, 7 Enmore Road, Putney, SW15. John E. Collins, Frank Risdon, Frederick Jones.

Taylor: Edward John Frederic, c/o Messrs W. Dobson Chapman and Partners, Jordangate House, Macclesfield. Applying for nomination by the Council under Bye-law 3(*d*).

Thompson: Roger Barnaby Gilchrist, MA (Cantab.), 52 Camberwell Grove, SE5. Prof. Sir Leslie Martin, Peter Moro, Peter Chamberlin.

Thomson: David, c/o Wheatley, 92 Lincoln Avenue, Glasgow, W3. Frank R. Burnet, James Bell, George W. Robertson.

Thomson: (Miss) Margaret Jean, DA(Glas.), Wateryetts, Kilmacolm, Renfrewshire. Prof. W. J. Smith, J. H. Glover, Peter S. Ferguson.

Thomson: Raymond Cyril, 31 Great Ormond Street, WC1. Applying for nomination by the Council under Bye-law 3(*d*).

Thorn: Donald Campbell, Dip.Arch.(Melbourne), c/o Victoria House, Melbourne Place, Strand, WC2. R. S. Demaine, Harry Winbush, R. Koren.

Tyler: Colin John, F. R. Steel and applying for nomination by the Council under Bye-law 3(*d*).

Vanezis: Christopher, 78 Cranford Drive, Hayes, Middx. Norman Keep and applying for nomination by the Council under Bye-law 3(*d*).

Veale: Norman Kerry, Dip.Arch.(Wales), 42A Fidlas Road, Llanishen, Cardiff. Lewis John, Arthur F. Hope, Sir Percy Thomas.

Wager: Stuart John, Copperfield, New Road, Ascot, Berks. Justin H. Alleyn, Arthur H. Gale, Alexander Flinder.

Wall: John Henry, Dip.Arch.(The Polytechnic), 7 Shakespeare Road, Hanwell, W7. Applying for nomination by the Council under Bye-law 3(*d*).

Watkins: Horace Douglas, 36 Firbank Avenue, St Julians, Newport, Mon. C. F. Bates, Johnson Blackett, P. G. Budgen.

Watson: Brian Donald, 70 Welholme Avenue, Grimsby, Lincs. J. Fred Pye, J. Konrad, W. Gregory Wilson.

Webster: Hugh, 132 Cromwell Road, SW7. D. L. Bridgwater, Peter Shepheard, Edward Narracott.

Westbrook: Richard Harry, 13 Fairfield Gardens, Portslade, Sussex. Andrew Renton and applying for nomination by the Council under Bye-law 3(*d*).

Wilkinson: Douglas Alfred, 36 Crescent Road, South Benfleet, Essex. F. F. Doyle, Paul Nightingale, J. M. Scott.

Willars: Desmond Thomas, 98 Bulkington Lane, Nuneaton, Warwickshire. L. A. Clarke, Maurice Harris, R. Hellberg.

Williams: David Mitchell, Dip.Arch.(RWA), 154 Weir Road, Clapham Park, SW12. Frank Risdon, Robert Potter, J. H. Jacob.

Williams: Leon, 81A Doods Road, Reigate, Surrey. Denis Poulton, Philip G. Freeman, Alexander Flinder.

Wingfield: John Richard, Dip.Arch.(Sheffield), 57 Abbeydale Park Rise, Totley Rise, Sheffield. Prof. Stephen Welsh, H. B. Leighton, Prof. John Needham.

Wonnacott: Barry John, Dip.Arch.(Manchester), 21 Denning Road, Hampstead, NW3. Prof. R. A. Cordingley, Cyril Mardall, Eugene E. Rosenberg.

Wood: Ralph Denison, AADipl., 93 Spa Hill, Upper Norwood, SE19. D. L. Bridgwater, Gordon H. N. Inman, H. A. J. Darlow.

Woodley: Derek George, 'Leap House', Ferry Road, Felixstowe, Suffolk. Frank Risdon, Ronald Ward, B. A. P. Winton-Lewis.

Yong: (Miss) Siew-Toong, Dipl.Arch.(Northern Polytechnic), Flat 68, Eton Hall, Eton College Road, NW3. C. G. Bath, S. F. Burley, J. E. Moore.

Members' Column

This column is reserved for notices of changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr Arthur H. Laver [*A*] is relinquishing his present position in the Borough Architect's Department of the County Borough of Sunderland on 1 July 1961, and he has been appointed Deputy County Architect to the Northumberland County Council. His address will remain 'Malvern', 17 Hillcrest, Middle Herrington, Co. Durham.

Mr E. Langford Lewis [*A*] has been appointed Deputy County Architect to the Denbighshire County Council.

Mr P. H. Rodgers, BARCH. [*A*], Chief Assistant Architect to Whiston Rural District Council, has taken up an appointment as Chief Assistant Architect to Kirkby Urban District Council, Kirkby Hall, Hall Lane, Kirkby, near Liverpool. He will be pleased to receive trade literature at the new address.

Mr S. D. Sane [*A*] has resigned from his position as Architect-Planner, Town and Village Planning Department, Lucknow, India, and he has been appointed Principal Town Planning Officer, Ministry of Town Planning, Government of Eastern Nigeria, Enugu, Nigeria.

Mr Alan Tate, MC, AMTPI, AILA [*A*], has resigned his position as Chief Planner, National Capital Commission, Ottawa, Ontario, Canada, and he has taken up an appointment as Development Manager, Costain Property Investments Ltd, Dolphin Square, London, SW1.

Mr T. White [*A*] has been appointed Research Fellow by the Newcastle Regional Hospital Board in association with the Board of Governors of the United Newcastle upon Tyne Hospitals. Initially the research will be directed towards means of achieving easily-cleaned finishes, types and settings of equipment in operating suites, and subsequently, to investigate the design and equipping of operating suites and other hospital departments. He will be pleased to receive relevant trade literature.

PRACTICES AND PARTNERSHIPS

Messrs Andrews, Emmerson and Sherlock (Mr Malcolm Andrews [*A*], Mr Alan Emmerson [*A*] and Mr Harley Sherlock [*A*]) of 63 Dean Street, London, W1, have taken **Mr John R. Davison** [*A*] and **Mr David R. Lewis** [*A*] into partnership. The name of the firm will remain unchanged.

Mr Peter Bosanquet [*A*] has taken into associate partnership **Mr Colin Oates** [*A*]. The firm will practise from 60 St John Street, Oxford, under the style **Peter Bosanquet and Partners.**

Mr Lionel Brett [*F*] has taken **Mr Francis Pollen** [*A*] into partnership. The firm will continue to practise from Watlington Park, Oxford (Watlington 140) under the style of **Brett and Pollen.**

Mr Andrew J. Connidis [*A*] has commenced practice on his own account at 296 Bagot Street, Kingston, Ontario, Canada.

Messrs Covell and Matthews [*F*/*A*] have ceased practising under that style as from 30 April 1961. The practice is now directed under the style of **Covell, Matthews and Partners** from 34 Sackville Street, Piccadilly, London, W1.

Mr Clifford Culpin, OBE [*F*] and **Mr Roland Robertson** [*A*] practising as **Clifford Culpin and Partners** at 39 Doughty Street, London, WC1, and at 18 Marlowes, Hemel Hempstead, Herts, have pleasure in announcing that as from 1 May 1961, **Mr Leonard Hobart** [*A*], **Mr Anthony Sargeant** [*A*] and **Mr Philip Vallis** [*A*] have been taken into full partnership, and **Mr Robert Pethybridge** [*A*] and **Mr Brian Kenchington** [*A*] into associate partnership. The name of the firm remains unchanged.

Mr K. P. Dexter [*F*] is pleased to announce that he has taken **Mr R. L. Staniland,** DIP ARCH [*A*] into partnership as from 17 April 1961. The firm's name **Reynolds, Tomlins and Dexter** has been changed to **Dexter and Staniland.**

Messrs R. Ferguson and S. McIlveen [*L*] announce that as from 5 April 1961 they have taken into partnership **Mr J. A. deM. Greeves,** BA (Cantab.), AMICE, AMIWE, who was formerly their Senior Engineering Assistant and has been associated with the firm during the past four years.

Mr C. Hadfield [*L*], in practice as **Teather and Hadfield,** has taken **Mr R. Midgley** [*A*] into partnership. The practice will continue under the style of **Teather and Hadfield,** but the address is changed to Yorkshire Insurance House, Market Place, Sheffield 1.

Mr Maurice Hanna [*A*] has commenced private practice at 38 Great Smith Street, London, SW1 (Sullivan 1021), where he will be pleased to receive trade literature.

Messrs W. S. Hattrell and Partners [*F*/*A*] have taken into partnership **Mr George R. Unwin,** AADIPL. [*A*] at 15 Piccadilly, Manchester, **Mr Gordon W. Hammond** [*A*] at 1 Queens Road, Coventry and **Mr John Roake** [*A*] at 21 Cleveland Place, King Street, London, SW1.

Mr **James Hopwood** [*F*], Architect of Trust Houses Limited, 53 Short's Gardens, London, WC2, retired on 31 May. He will continue to assist Trust Houses Limited in a private capacity on work connected with hotels, and he would be pleased to receive trade literature, etc., at 20 Bishop's Road, Hove 4, Sussex (Brighton 56309).

Mr **John A. Lane** [*A*], **Mr Duncan S. Bremner** [*A*] and **Mr Dennis J. R. Garnett** [*A*] have now entered into partnership. They will practise under the style of **Lane, Bremner and Garnett** from 125 Douglas Street, Glasgow, C2 (Douglas 0896).

Mr **A. C. McNab**, AMTPI [*A*], and **Mr E. R. H. Jamieson** [*A*] have commenced practice under the style of **McNab and Jamieson.** They will practise for the time being from 28 Ripplevale Grove, Islington, London, N1 (North 6364).

Mr **Geoffrey Pennell** [*A*] has opened an office at Church Lane House, Chalfont St Peter, Bucks, with **Mr D. R. Bennett** [*A*] in charge, and will be pleased to receive technical literature and catalogues. The office at Building 332, Northolt Airport, Ruislip, Middlesex, will continue under the direction of **Mr D. C. W. Shreeve.**

Mr **Allan D. Reid** [*F*] has taken into partnership **Mr John Clarke,** AADIPL. [*A*]. The practice will continue from 49 Meneage Street, Helston, Cornwall (Helston 2509) under the title of **Messrs Allan D. Reid and John Clarke.**

Mr **J. E. B. Robson,** FRICS [*L*] has retired from the firm of **Floyd, Robson and Paul,** St Nicolas House, West Mills, Newbury, Berks, and the remaining partner **Mr E. H. Paul** [*A*] has taken **Mr B. D. Palmer** [*A*] into partnership. The practice will continue at the same address under the style of **Robson, Paul and Palmer.**

Messrs David Stern and Partners (David and Ruth Stern [*AA*]) of 24 Gloucester Place, London, W1, announce that **Mr Ronald Trebilcock** [*A*] who has for some time been associated with the practice became a full partner on 10 April 1961.

Messrs Pascal J. Stienlet and Son [*F/L*] of 4 Queen's Square, Saville Row, Newcastle upon Tyne 1, have recently opened a branch office at 40 Howard Street, North Shields, under the direction of **Mr S. V. Joel** [*A*].

Messrs Sidney F. Tidmarsh, AIAA, and **Derek S. Tidmarsh** [*A*], practising as **Herbert Wright and Tidmarsh,** announce that they have taken into partnership **Mr David A. Penning,** DIP. ARCH. [*A*]. The practice will continue under the same title from 35 Pentonville Road, London, N1.

Mr **Kenneth Turner,** DIPL.ARCH. (Leeds) [*F*], Mr **Alan Chambers,** DIP.ARCH. (L'pool) [*F*], and **Mr Frank Sykes,** DIP.ARCH. (Leeds), DIP.TP, AMTPI [*A*] have formed a group practice under the style of **Northern Plan Group** with head offices at 70 Commercial Street, Batley, Yorks; 2 Grimshaw Street, Burnley, Lancs, and 27 Bardon Chambers, Infirmary Street, Leeds 1, Yorks. Trade catalogues and samples would be appreciated at the branch offices at 75–79 Market Street, Manchester 1, and 330 Lytham Road, Blackpool South, Lancs.

Messrs Kenneth Wakeford, Jerram and Harris [*FF/L*] have pleasure in announcing that as from 1 April 1961 they have taken into partnership **Mr J. W. Fraser** [*A*], who has been managing their Bristol office. The partnership will continue to practise from 7 Connaught Place, London, W2, and 3 Upper Berkeley Place, Bristol 8, and the style remains as at present.

Messrs Weightman and Bullen (Mr A. G. Bullen [*F*], Mr D. J. Brown [*A*], Mr M. Sloan [*A*] and Mr S. M. Pater) of 76 Rodney Street, Liverpool 1, have opened a branch office at Acomb House, Acomb, York (York 72023). **Mr D. J. Brown** will be resident partner in charge of the new branch and he will be pleased to receive trade literature, etc. that satisfies BS 1311.

Mr **John Wingate** [*F*] of 25 Wellington Street, Glasgow, C2, has taken into partnership **Mr A. Calder** [*A*] and **Mr C. Smith** [*A*]. The business will be known as **John B. Wingate and Partners.**

CHANGES OF ADDRESS

Mr R. S. Batstone [*L*] has changed his address to 10 Queen's Gate Place Mews, South Kensington, London, SW7 (Knightsbridge 8503).

Messrs Biggins and Associates [*AA*] have moved to new premises and are now practising at Richmond Place, Boughton, Chester (Chester 26228).

Mr F. P. G. Biggs [*A*] has changed his address to 7 Mill Close, Reading Road, Wokingham, Berks.

Mr Giles Blomfield [*A*] has moved from Hampstead to Cornwall to be Chief Assistant Architect to **Taylor and Crowther** [*AA*], Martins Bank Chambers, Truro. His home address is 3 The Close, Uplands Park, Truro

Mr George L. Boswell [*A*] has changed his address to 'Dovedale', Hocombe Road, Chandlers Ford, Hampshire.

Mr Bernard M. Broadbridge [*A*] has changed his address to c/o Mence and Moore, PO Box 588, Port-of-Spain, West Indies.

Mr Oliver Carey [*F*] has moved his office to 28 Newnham Road, Cambridge (Cambridge 54504).

Mr Robert Carlick [*A*] has changed his address to 'Beckett', Manor Road, Goring-on-Thames, Oxon. (Goring-on-Thames 439), where he will be pleased to receive professional literature, but not representatives as it is his private address.

Mr John G. Coppock [*A*] has changed his office address to 41 Donegall Pass, Belfast 7 (Belfast 24153).

Mr P. M. Cowell [*A*] has changed his address to 'Whitecroft', New Road, Haslingfield, Cambs.

Mr Ian W. Crawford [*A*] and **Mrs Barbara Crawford** [*A*] have changed their address to 64 Orton Close, Water Orton, Warwicks.

Mr E. E. C. Crockett [*A*] has changed his address to Town Planning Division, City Engineer's Department, PO Box 680, Durban, Natal, South Africa.

Mr Leslie A. Cutmore [*A*] has changed his address to 41 Broomfield Road, Tilehurst, Reading, Berks.

Mr Peter Denney [*A*] has changed his address to Heslegaardsvej 3, Hellerup, København, Denmark.

Mr E. Francis-Jones [*A*] has changed his address from 23 Great Darkgate Street, Aberystwyth, to 27 North Parade, Aberystwyth.

Mr William J. Gilmour [*A*] has moved his office to 258 Bath Street, Glasgow, C2 (Douglas 0170).

Mr Allanson Hick [*F*] has changed his address to 24 Albion Street, Hull (Hull 35603).

Messrs Philip Hirst and Wyn Jones [*F/A*] of 35 Doughty Street, London, WC1, announce that as from 1 May 1961 the new address of their Haverfordwest office is 22 High Street, where they will be pleased to receive trade catalogues.

Mr K. M. G. Kirkbride [*A*] has changed his address to Beagletodn, Towednack, St Ives, Cornwall.

Mr Iain Langlands [*A*] has changed his office address to 7A Hampstead High Street, London, NW3, where he will be pleased to receive trade literature.

Mr Philip Langley [*A*] has changed his address to 2 Allée des Sycamores, Le Monastere, Ville D'Auray, Seine et Oise, France.

Mr H. W. McLean [*A*] has changed his address to 550 Church Street, Beaurepaire, Beaconsfield, Quebec, Canada.

Mr J. Kenneth Major [*A*] has changed his address to 2 Eldon Road, Reading, Berks (Reading 52698).

Mr Michael M. Mitchell [*A*] has changed his address to 962 S. Granville Avenue, Los Angeles 49, California, USA.

Mr P. O'Muireadhaigh [*A*] has changed his address to 21 Merrion Square, Dublin.

Mr Derek Parker [*A*] has changed his address to 68 Lower Crescent Avenue, Sausalito, California, USA. His business address remains c/o Anshen and Allen, 461 Bush Street, San Francisco, California.

Mr J. E. T. Pearson [*A*] has changed his address to 2 Sandown Court, Grange Road, Sutton, Surrey.

Mr Ivan B. Sive [*A*] has changed his address to Suite 620 Vigilans, 267 Pretorius Street, Pretoria, South Africa, where he will be pleased to receive trade literature.

Mr Philip H. Spence [*A*] has changed his address to 34 Mount Vernon Avenue, Coatbridge.

Mr S. Standing [*A*] has changed his address to 'Kibs Cottage', 119 Cuckfield Road, Hurstpierpoint, Sussex (Hurstpierpoint 2432).

Mr Howard D. Sugden [*F*] has changed his office address from 102 Fitzjohn's Avenue, London, NW3, to 71 Blandford Street, London, W1 (Welbeck 4194).

Mr Lionel F. Taylor [*A*] has changed his address to 23 Alamein Crescent, Onekawa, Napier, New Zealand.

Mr W. J. Whiteside [*Retd A*] has changed his address to c/o Barclays Bank Limited, Mbabane, Swaziland, South Africa.

Mr T. C. Whiting [*A*] has changed his address to 'Tanglin', Parkway, Darley Dale, near Matlock, Derbyshire.

Mr Laurence Williams [*A*] has changed his address to 71 Station Road, Llanishen, Cardiff.

Messrs John B. Wingate and Partners [*F/A*] have changed their business address to Grosvenor Buildings, 68 Gordon Street, Glasgow, C2 (Central 3991–2) where they will be pleased to receive trade catalogues.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Associate (40), eight years in private practice as principal with wide design and administrative experience at home and overseas seeks partnership with older member who wishes to retire gradually from practice. More affinity to sound practical design in well-tried methods, construction and finishes rather than to purely contemporary outlook. Some capital available. Area preferred, eastern counties, north of Thames, south of Humber. Box 252, c/o Secretary, RIBA.

Partnership wanted, or responsible position leading thereto, in established practice, London or southern counties, by Associate and AMTPI (38). Wide experience at home and abroad in design and control of contracts up to £1,000,000. Single. Car owner. Some capital available. Box 258, c/o Secretary, RIBA.

Expanding practice in north-west Surrey requires an experienced Associate to run a branch office. Partnership offered after a probationary period. Please write in confidence to Box 259, c/o Secretary, RIBA.

Associate (Dip. Arch.) 40, exceptionally wide experience Private, Local Government and Civil Service Offices with ten years' experience in Senior and Managerial positions in West Africa and West Indies. Specialises technical, contract, management and office finance. Seeks partnership or position leading thereto. Some capital available. Box 261, c/o Secretary, RIBA.

Old established practice in West Riding of Yorkshire for disposal. The principal would agree to remain for a limited period as consultant until present work in hand is completed. Box 262, c/o Secretary, RIBA.

Old established general practice in south-west coastal town requires experienced assistant with a view to partnership. Box 263, c/o Secretary, RIBA.

Associate (36) late own successful tropical practice seeks responsible position with a view to possible partnership south, south-west, west of England. Some capital available. Please forward full details to Box 264, c/o Secretary, RIBA.

Established firm of London architects and consulting engineers with large-scale work in England and abroad wish to extend further their practice at home and overseas. Purchase of already established practices envisaged or applications from experienced architects with potential client connections considered. In England the areas of London, Liverpool, Manchester, Birmingham are favoured. Overseas areas favoured Middle East, North Africa, West Africa. Ample capital available for outright purchase of sound existing practices or amalgamation with control. We are particularly interested in acquiring substantial practices where the senior partner wishes to retire and would co-operate for a limited period with suitable remuneration. Box 265, c/o Secretary, RIBA.

Young Associate, with all-round experience, required for new and expanding practice in Cambridge, with view to partnership. Box 266, c/o Secretary, RIBA.

Associate with good experience, including local authority housing, required with a view to partnership in provincial practice. Box 267, c/o Secretary, RIBA.

Fellow, conducted own architectural practice in London for 12 years, in Canada for 10 years, returning to UK, wishes to join busy progressive expanding firm of London architects with a view to partnership after probationary period. Capital available. Please reply to Box 268, c/o Secretary, RIBA.

ACCOMMODATION

Offices to let, two inter-communicating rooms, 425 sq. ft, available immediately, London,W1 area. Box 269, c/o Secretary, RIBA.

MISCELLANEOUS

The following *Architectural Review* in good condition for sale separately or *in toto*. Payment to be made to ABS. Offers: 717 (October 1956), 718, 728, 729, 732 to 769 (March 1961). Box 260, c/o Secretary, RIBA.

The Royal Institute of British Architects, as a body, is not responsible for the statements made or opinions expressed in the JOURNAL.

Practice Notes

PRACTICE QUERIES

1. Fees for a building extension

Q: Would the addition of a new wing to an existing structure constitute work to an existing building as contemplated in Clause 2(ii) of the Scale of Professional Charges.

A: The erection of a new wing to a site adjoining an existing building would be treated as new work. The cost of 'linking up' two buildings would form part of the total cost of the executed works on which the appropriate percentage charge is calculated. The fee would thus be the percentage stated in Clause 1 of the Scale of Professional Charges.

2. Fees for repetitive work

Q: I have been asked whether I should not make a reduction in my fee for a design of a tall block of flats on account of the repetition of similar flat units within the block.

A: Repetition of flat units within a block design does not constitute repetitive work as contemplated in the Scale of Professional Charges. It is only where the block as a whole is repeated that a reduction in the fee may be made. This point is brought out in the Application of the RIBA Scale of Professional Charges to Repetitive Housing Work published in the JOURNAL for May 1961.

IN PARLIAMENT

HOUSE OF LORDS

Preservation of Villages. Lord Bossom: My Lords, I beg leave to ask the first question which stands in my name on the Order Paper.

[The question was as follows: To ask Her Majesty's Government whether they would consider issuing advice to all planning authorities having jurisdiction over our beautiful villages, to do their utmost to prevent the beauty of these precious places being destroyed by the erection of ill-placed housing estates or inappropriate buildings in the midst of these irreplaceable and typically British scenes.]

Earl Jellicoe: My Lords, it is a vital aim of planning that new buildings in villages should be carefully sited and designed so that they do not spoil their surroundings. My right honourable friend the Minister of Housing and Local Government believes that local planning authorities have this constantly in mind. The subject is dealt with in a booklet called *New Houses in the Country*, which he published last year. I shall be glad to send the noble Lord copies of the booklet and of the accompanying circular to local authorities.

Lord Bossom: My Lords, while thanking my noble friend for that answer, may I ask whether he is aware that comparatively recently the Minister has gone exactly opposite to the recommendation made to him by his own officials that he should not allow this sort of thing, and has allowed it to go ahead in two particular cases?

Earl Jellicoe: My Lords, I was not aware of that, but if my noble friend would let me have the details of the two cases, I should, of course, be glad to take them up with my right honourable friend.

Lord Bossom: My Lords, I thank my noble friend very much indeed for that answer. Would it not be worth while strongly recommending that further consideration be given in these cases instead of their being casually answered and let go, because we are losing something we can never replace once they have gone?

Earl Jellicoe: My Lords, I should like to say only that the Minister believes, and believes strongly, that the best way of securing improvement is by way of general advice, encouragement and education of public opinion, and that he takes every opportunity to encourage good design and the use by local authorities of architects and landscape architects. Indeed he is instituting this year a special award with that in mind.

Tall Buildings and Town Planning. Lord Bossom: My Lords, I beg leave to ask the second question which stands in my name on the Order Paper.

[The question was as follows: To ask Her Majesty's Government whether they would give consideration at the earliest possible time to the careful town planning of the British congested cities where tall buildings are likely to be erected, to ensure that these buildings are constructed in places where their presence will cause not only added but avoidable and serious congestion to the existing local traffic situation.]

Earl Jellicoe: My Lords, the policy of my right honourable friend the Minister of Housing and Local Government is that each proposal for the erection of a tall building should be considered by the local planning authority on its merits, taking into account, among other things, the effect of the building upon traffic. Where the planning authority grant permission for a tall building likely to generate traffic, they impose conditions designed to avoid the increase of traffic congestion, for example, conditions requiring provision of car parking space within the curtilage.

Lord Bossom: My Lords, while thanking my noble friend for that answer, may I ask whether he is aware that we are making the same mistakes here today that were being made in America 50 years ago, due to the fact that a comprehensive planning arrangement is not made before any of these buildings are laid out? We shall need to have them, but at the same time I think we ought to plan the areas and not leave it to chance and to individual examination at the last minute. It ought to be done collectively on a very large scale.

Earl Jellicoe: My Lords. In reply to my noble friend I would say that I do not think this matter is left to chance. Each individual project is gone into very carefully indeed. I imagine that he may have in mind the recommendations of the Royal Fine Art Commission in their recent Report, their Seventeenth Report. On that, all I would say is that the Ministry and the London County Council will give very careful consideration to the views of the Royal Fine Art Commission; and, in fact, as a start, the Ministry are initiating discussions with the LCC about this whole matter. (8 May 1961.)

HOUSE OF COMMONS

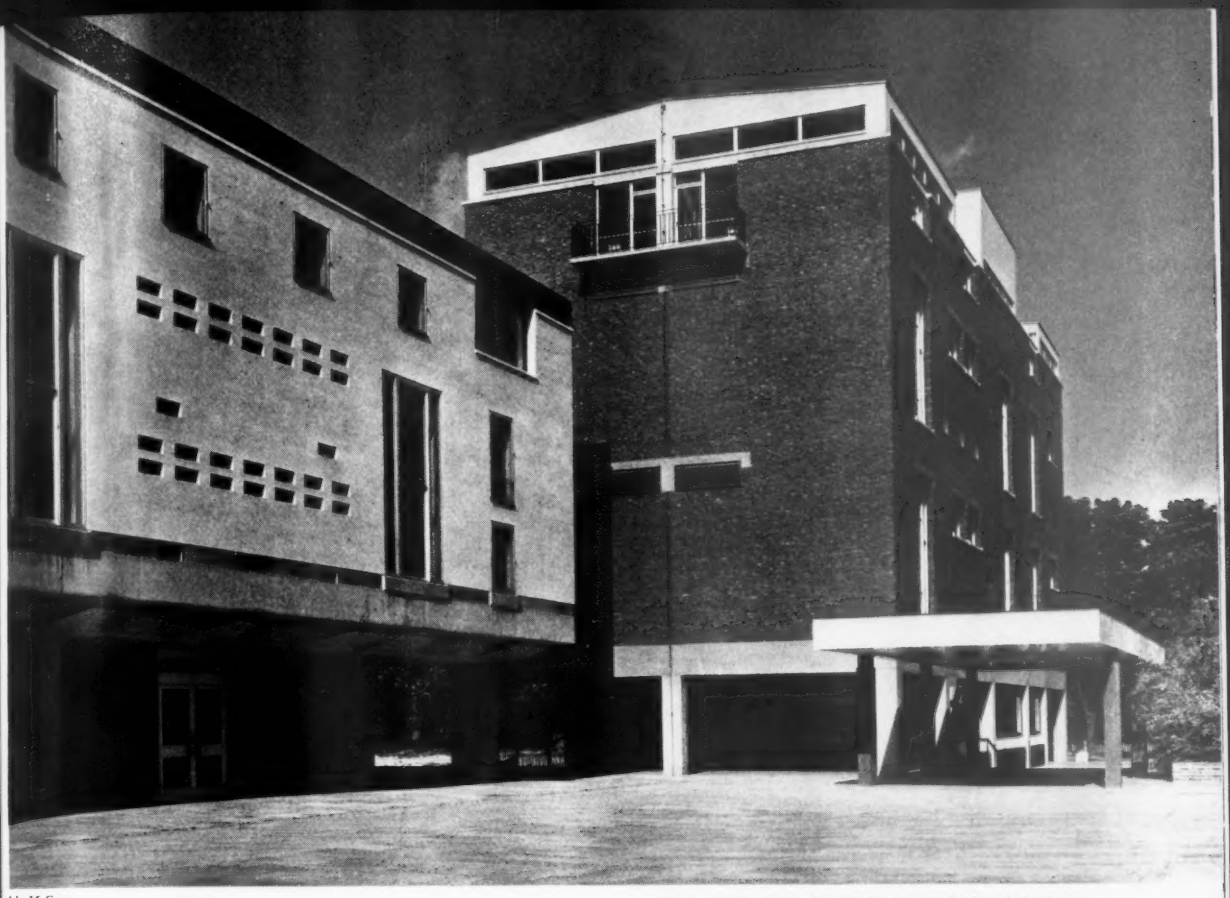
Hospital Building (Fixed Price Tenders). Mr Ridsdale asked the Minister of Health what reply he has had to his letter to the North East Metropolitan Hospital Board concerning the review of its procedure to enable fixed price tenders to be accepted more speedily.

Mr Powell: I am telling hospital authorities generally that fixed price tenders should not be open for more than two months. (8 May 1961.)

NATIONAL FEDERATION OF BUILDING TRADES EMPLOYERS

Supplement to Standard Form of Building Contract. Messrs Charles Knight and Co., Ltd., local government and law printers, have recently published a supplement to the Standard Form of Building Contract by Sir Derek Walker Smith and Howard A. Close. Copies of this supplement may be obtained free on request if a stamped addressed envelope (6*d*. stamp, envelope 9 in. by 4 in.) is sent to the publishers at 11–12 Bury Street, London, EC3. Copies of the book, together with supplement, are available at £2 5*s*., plus 2*s*. postage.

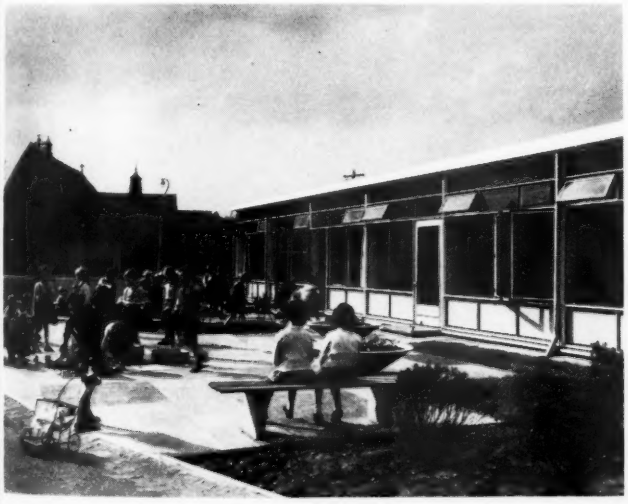
Owing to pressure on space, Book Reviews and Obituaries have been held over until next month.



John McCann

University Faculty Buildings, Sidgwick Avenue Cambridge. 1961
Sir Hugh Casson, Neville Conder and Partners [*FF AA*]

ARCHITECTURE TODAY: EDUCATIONAL



School at Newark (erected under the 'Consortium of Local Authorities Special Programme', CLASP). 1959
W. D. Lacey [*A*], County Architect, Notts.

The Times

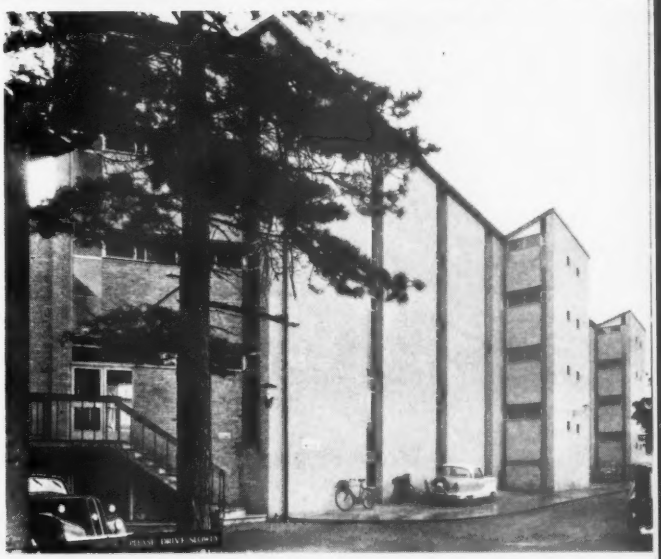
Rutherford School, St Marylebone, London. 1960
Leonard Manasseh and Partners [*AA*]

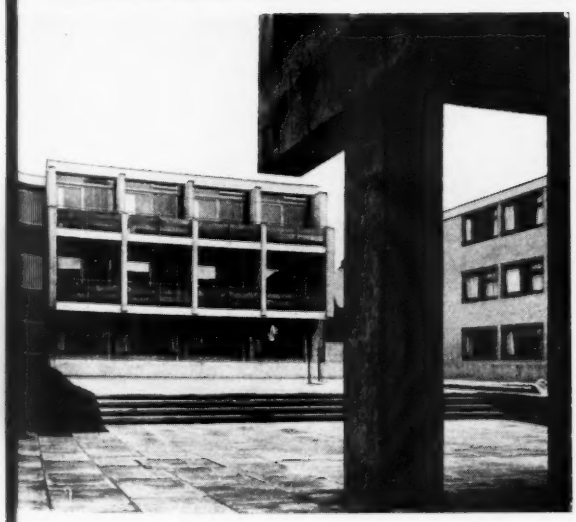
Colin Westwood

de Burgh Galwey

Postgraduate Flats
Churchill College, Cambridge. 1960
Richard Sheppard, Robson and Partners [FF/AA]

Bed-Sitting Rooms for Undergraduates
St John's College, Oxford. 1960
Architects Co-Partnership [F/A]





County Modern School, Richmond, Yorkshire. 1959
D. Clarke Hall [*F*] and H. S. Scorer [*A*]
de Burgh Galwey

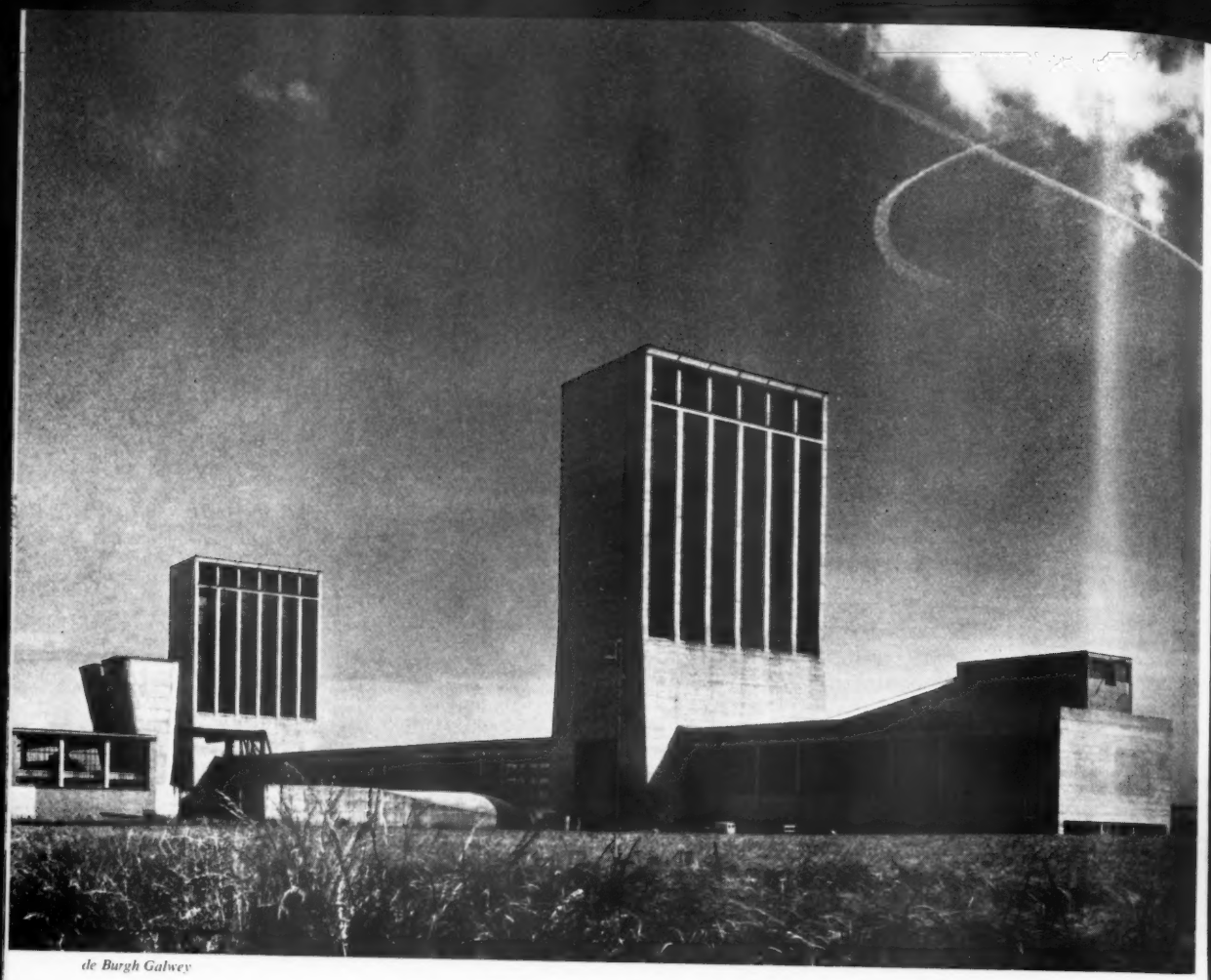
Fairlawn Primary School, Lewisham, London. 1958
Peter Moro [*F*]
Mann Bros

Women's Hall of Residence, University of Leicester. 1960
Sir Leslie Martin [*F*] in association with Trevor Dannatt [*F*]

Extension to School of Architecture
University of Cambridge. 1959
Colin St John Wilson [*A*] and Alex Hardy [*A*]
John McCann

Undergraduates' Lodging Houses
Clare College, Cambridge. 1958
David Roberts [*F*] in association with Christophe Grillet [*A*] and Geoffrey Clarke [*A*]
John McCann

The Library, University of Sheffield. 1959
Gollins, Melvin, Ward and Partners [*F AA*]
H. Snoek



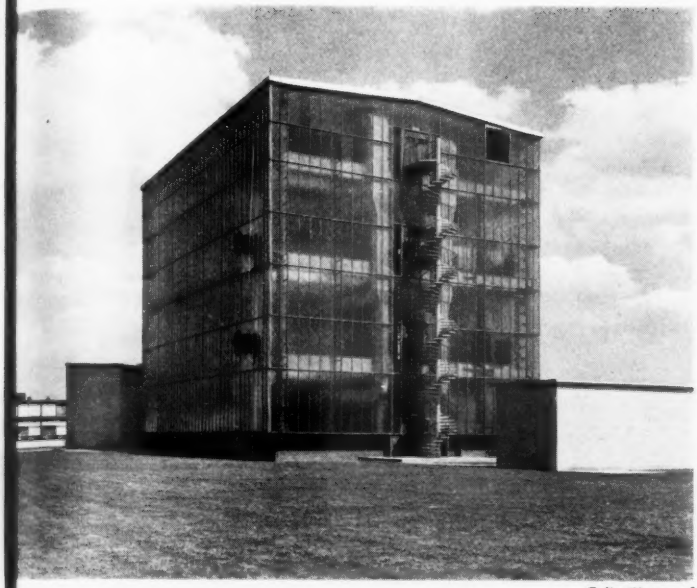
de Burgh Galwey

Rothes Colliery, Fife. 1955
Egon Riss [*F*]

ARCHITECTURE TODAY: INDUSTRIAL

Offices for Carr and Co. (Paper) Ltd, Shirley Warwickshire. 1958
Erno Goldfinger [*L*]

de Burgh Galwey

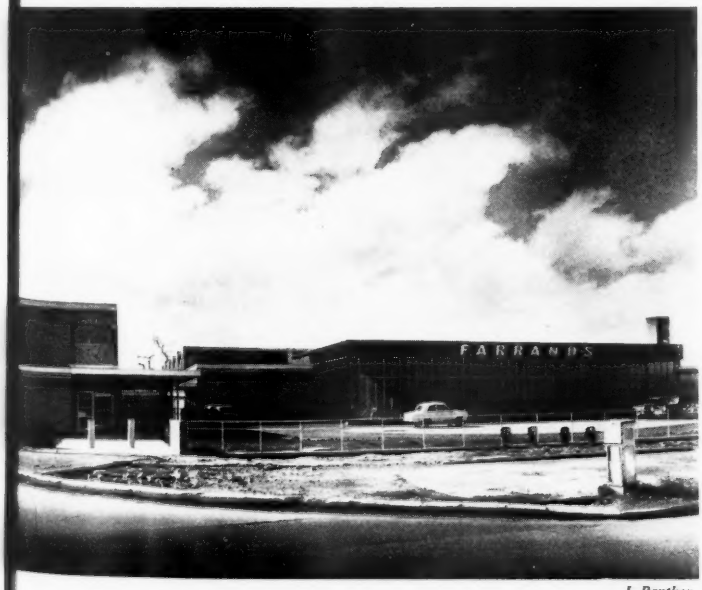


Colin Westwood

Research and Production Buildings and Offices for CIBA (ARL) Ltd, Duxford Cambridgeshire. 1958
Ove Arup and Partners

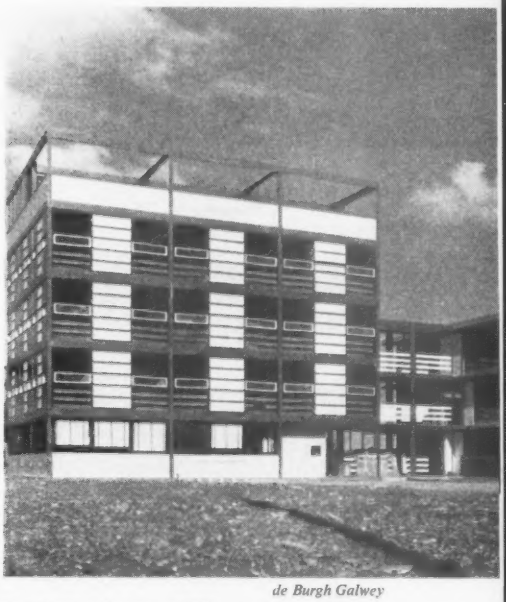
H. Snoek

Thorn House (office building) Upper St Martin's Lane, London. 1959
Basil Spence and Partners [*FF*]



J. Panther

Office and Warehouse Wigman Road, Nottingham. 1957
J. M. Austin-Smith and Partners [*F/AA*]



de Burgh Galwey

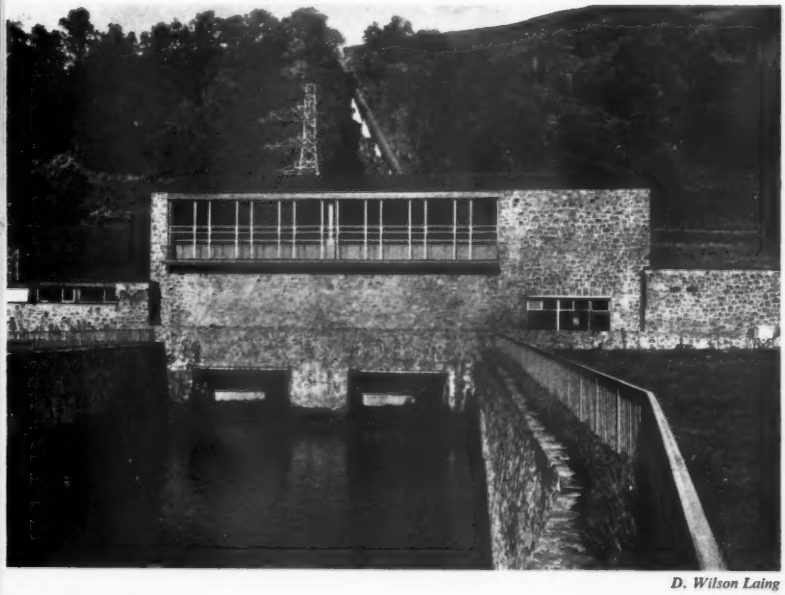
Seed Warehouse, Witham, Essex. 1954
Chamberlin, Powell and Bon [*F/A*]

de Burgh Galwey

Paper Mill for the Bowater Paper Corporation Ltd, Northfleet, Kent. 1959
Farmer and Dark [FF/A]

Sam Lambert

Lochay Hydro-Electric Power Station, Perthshire. 1959
Robert H. Matthew [F]



D. Wilson Laing

H. Snoek

Castrol House (office building) Marylebone Road, London. 1959
Gollins, Melvin, Ward and Partners [F/AA]

Radiochemical Centre, Amersham Bucks. 1960
J. Douglas Mathews and Partners [F]

Offices, Eastbourne Terrace Paddington. 1960
C. H. Elsom and Partners [F/A]

H. Snoek

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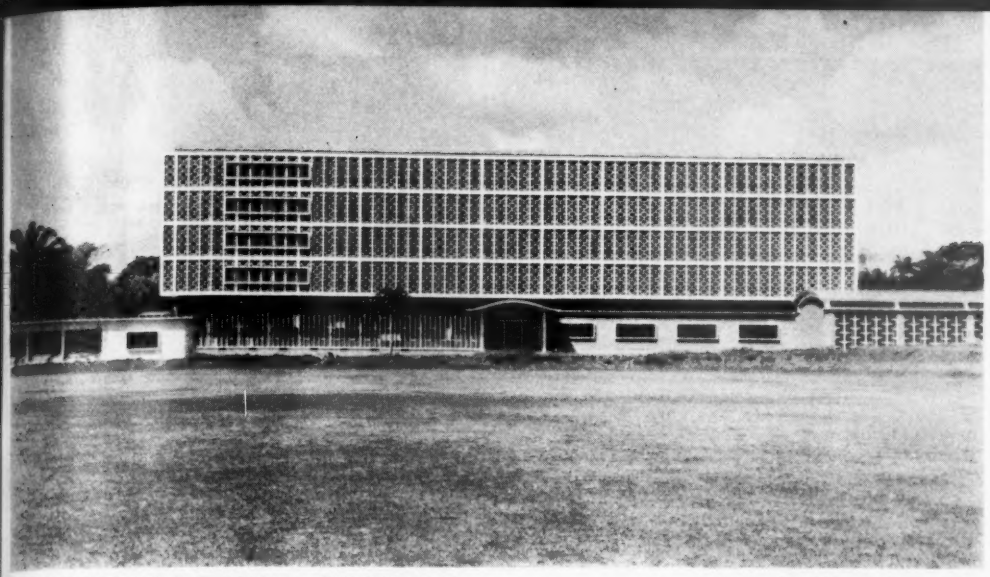

ARCHITECTURE TODAY: OVERSEAS

University Library, University College, Ibadan, Nigeria. 1953
Fry, Drew and Partners [*FF/AA*]

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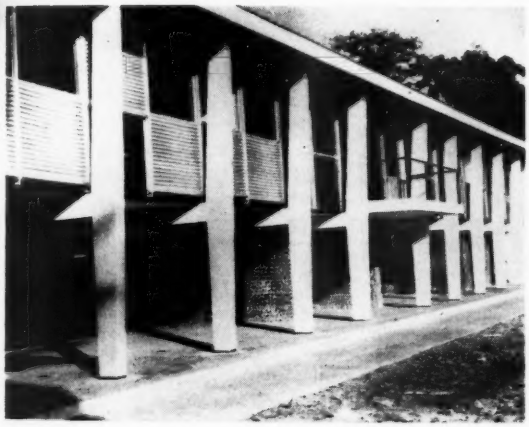


UK High Commissioner's Residence Lagos, Nigeria. 1960
Lionel Brett [*F*]

Kumasi College of Technology Kumasi, Ghana. 1954
James Cubitt and Partners [*F/AA*]

Peter Pitt

The south elevation. The roof turret is a Signalman's look-out added in 1866.

THE SHEERNESS BOAT STORE (1858-60)

By Eric de Maré [*A*]
and Professor A. W. Skempton, FRS

Photographs by Eric de Maré

Introduction

de Maré

In the summer of 1956 the Architectural Press sent me on a roving commission to photograph the best examples I could find of the early industrial buildings of England. That involved a meandering caravan tour of exploration, including penetration with permits into several of the closely guarded naval dockyards, where, amidst the confused accretions of the years, a remarkable number of fascinating structures of the 18th and 19th centuries survive, unknown to the public.

At Sheerness I found by chance an unrecognised building which has since proved to be of considerable importance in the evolution of modern architecture. Its nautical trimness and the long, rhythmical, unadorned and dignified simplicity of its frame-and-fill construction made an immediate impact. It was impossible to date precisely from its general appearance, though it seemed to belong to the inter-war years and would therefore be outside the 'terms of reference' of my commission. I photographed the main elevation nevertheless, merely because I liked it, making no investigations beyond asking the chief engineer of the dockyard if he could tell me its purpose and date. He said it was a boat store, and, running through a book which listed the structures of the yard, he announced that it had been completed in 1861 – to my patent astonishment and secret doubt.

The photograph was published in the special issue of the *Architectural Review* of July 1957 entitled 'The Functional Tradition in Early Industrial Buildings' (later issued as a book), with a text by Professor J. M. Richards, CBE, who was the first to point out that so-called functionalism is no innovation but has a tradition which is independent of period styles.

Professor Skempton, who knows more than anybody about the origins of modern structure, noticed the photograph and told me that if the date given in the caption was correct, the Sheerness Boat Store was a very important historical building – indeed, the first multi-storey structure in existence having a complete iron frame. France, he said, claimed by long tradition to possess the first of that kind in its famous Menier factory, built some 12 years after the Boat Store in a typical late-Victorian manner, but now England might be entitled to claim the distinction with a building of far greater elegance and in a truly modern idiom.

We went to Sheerness to investigate. There our first pleasure was to spot an oval plaque cast into each of the four corner columns of the Boat Store which read: 'REGENTS CANAL IRON WORKS. LONDON. HENRY GRISSELL. 1859.' We entered the building with its central nave, four-storeyed aisles and lofty forest of roof trusses. It looked like a factory of the 1930s. 'All this seems to have been rebuilt', muttered Skempton in a disappointed tone. However, while I indulged in a photographic orgy, he went off to explore the dockyard archives. He returned, delighted, to declare that he had unearthed the original drawings dated 1858 and that without a doubt the whole structure was virtually original and complete. The only changes during the century had been (1) re-covering the roof, (2) replacing the original corrugated iron wall panels by their modern equivalent, (3) substituting the original corrugated iron panels below the ground-floor windows by brick panels, (4) replacing the original sash windows (alternately fixed and sliding sideways and having two vertical glazing bars and one horizontal in each window) by casements (having five

The interior

instead of the original four frames in each bay and one vertical glazing bar and two horizontal ones in each window), (5) new sliding doors.

The building was a distinct find which gave us the collector's thrill of discovery. Since its survival was threatened by the coming sale of the whole dockyard by the Admiralty, we hastened to persuade the Ministry of Housing and Local Government to schedule the Boat Store as 'a building of special architectural or historical value'. To its credit, the Ministry immediately did so and the building now has some limited official protection.

Professor Skempton continued his researches and on 3 February 1960, at the Science Museum, he gave the results to the Newcomen Society in a paper entitled 'The Boat Store, Sheerness (1858–60), and its place in Structural History'. That paper will be published in the *Transactions* of the Newcomen Society towards the end of this year, and it can be studied in the illustrated typescript copy in the RIBA Library. It is too detailed to give here, but he has written a short account for the JOURNAL, which now appears in print for the first time.

What of the Boat Store's future? It is worth full protection and preservation as a National Monument. Could it be re-erected on a suitable site to serve as the urgently needed Museum of Industrial Archaeology?

The Building

A. W. Skempton

Description

The Sheerness Boat Store consists of two buildings or 'aisles' four storeys high flanking a central 'nave'. The whole is 210 ft long by 135 ft wide with a skylight along the length of the roof over the nave, and windows extending from end to end of the two main external walls. The total height to the ridge is 53 ft. The nave is spanned by three travelling girders – one at each floor level – by means of which boats were hoisted up and manœuvred into place on the upper floors.

Each aisle has four rows of columns, spaced at 14-ft 6-in. centres transversally and at 30-ft centres longitudinally except in the external walls, where they are 15 ft apart. Each column is founded on four 12 in. diameter whole-timber piles driven to a depth of about 60 ft below ground level. The piles are cut off 12 ft below the surface and capped with four 12-in. by 12-in. timbers set in concrete. A 3-ft by 3-ft brick pier is built up, with a 12 in. thick granite block to receive the column base. The columns (referred to as 'standards' in the original drawings) are cast-iron H-section members with 9-in. flanges and different depths in each storey, but typically 14 in. They were cast in two lengths and bolted together; just below second floor level, for the internal columns, and just above this floor, for the external columns. The corner columns are 9 in. square in section (hollow) with projecting flanges on the two outer faces. They were cast in four lengths, the total height of the columns being 40 ft.

The ground floor is a concrete slab, but the upper three floors consist of oak planks 9 in. wide by 3 in. thick. These run longitudinally and are supported on cast-iron transverse I-section beams at 30-ft centres on plan, and by intermediate timber joists at 7-ft 6-in. centres. The beams are 12 in. deep with 6-in. flanges, but the flange width is increased to 9 in. at the ends to agree with the flanges of the columns. The first floor joists are 12 in. by 6 in. and those supporting the second and third floors are 12 in. by 4 in. and 12 in. by 3 in. respectively. The safe loadings are now given as 60, 40 and 30 lb. per sq. ft for the 1st, 2nd and 3rd floors, but the original loadings are unknown.

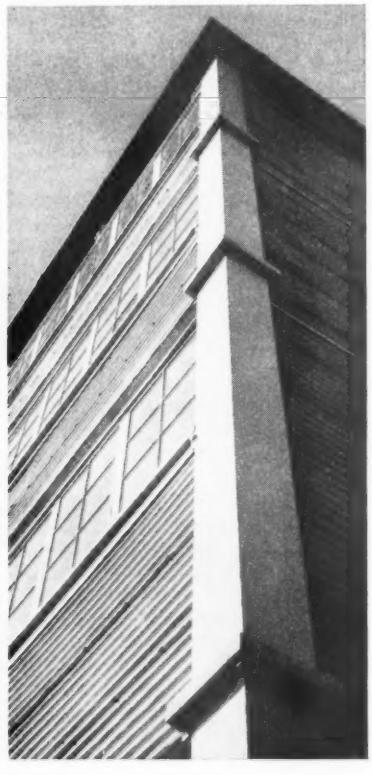
The beams have a clear span of 13 ft 6 in. and frame into the columns, but the joists bear on longitudinal wrought-iron plate girders of 29-ft 9-in. span. These floor girders are 18 in. deep by 12 in. wide, and the roof trusses are supported on similar girders 24 in. deep. The web plates are $\frac{1}{4}$ in. thick in three lengths, with joint plates, and T-stiffeners every 7 ft 6 in. The flanges are made

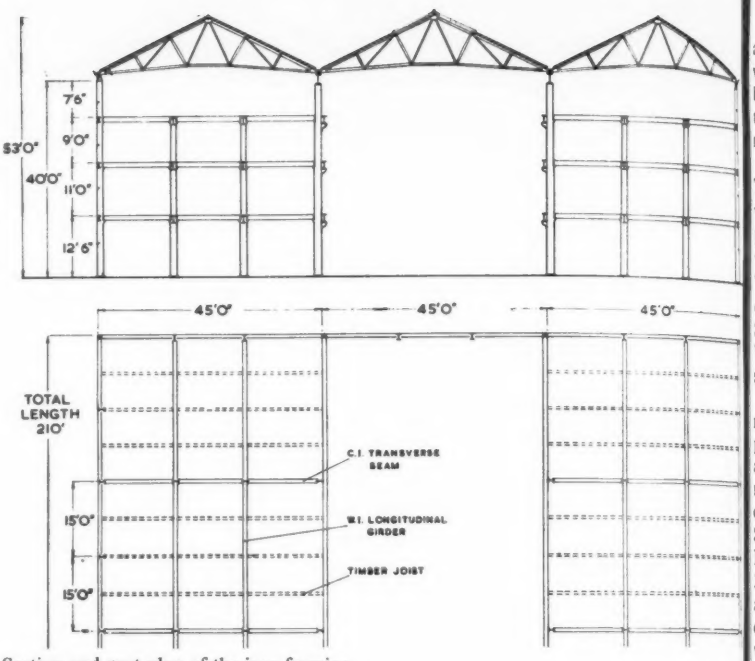
up from three $\frac{9}{16}$-in. plates in six lengths. Rivets 1 in. diameter are used throughout. The wall beams ('outside girders' on the drawings) are of cast iron 12 in. deep with 9-in. flanges. The web is stiffened by raised panels with semi-circular ends which give a pleasant decorative effect, since these beams, like the outer flanges of the columns, can be seen in the elevations. All the beams and girders are fixed to the columns by four $\frac{3}{4}$-in. bolts at each connection, and the stability of the whole building is entirely dependent on the portal bracing derived from the rigidity of these joints. There can be no doubt that the cast-iron beams were regarded by the designer as an essential component of stability. They are called 'transverse bracing girders' on the working drawing and the timber joists are sufficient merely to support the floor. Vertical reactions at the ends of the beams and girders are transmitted by cantilever brackets on the columns.

The windows rest on a 6-in. by 4-in. angle iron. The wall panels, consisting of corrugated iron, nestle in behind the column flanges and are supported by four small wrought-iron angles in each bay. There is a cast-iron plinth 18 in. deep along the base of the walls.

Across the width of the building are three pitched roofs of 45-ft span, supported by wrought-iron tension members, and cruciform-section cast-iron struts displaying a nice entasis. These trusses are pin-jointed at their supports on the longitudinal girders and external capping beams. The slates were originally carried on 3-in. by 2-in. battens at 11-in. centres, spanning 7 ft 6 in. between the trusses. Rainwater is carried off in iron gutters and down the interior of the corner columns. Expansion joints are provided in the gutters, but I have not been able to find any other expansion joints in the building.

A corner column of hollow 9 in. square section in four parts bolted together at flanges which project from the two external faces.





Section and part plan of the iron framing.

Portal Bracing: The main structural innovation of the Boat Store is the provision of lateral stability entirely by the rigid connections between beams and columns. At the time it was built, portal bracing was usually achieved by spandrel brackets or 'arched' girders which allowed scope for decorative treatment, but here, for the first time so far as I am aware, the modern form of portal bracing, using only a rigid joint between columns and a solid web beam of normal proportions, was introduced.

H-Section Columns: The connections for portal bracing are far more readily effected if the beams can be bolted to the flange or through the web of an H-section column, than is possible with a circular column. The connections in the Crystal Palace, although ingenious, were clumsy compared with those in the Boat Store. Moreover, eccentric loading is inevitable in the external columns and also in columns carrying a travelling crane. An H-section is therefore also more appropriate for these positions in a building.

I-Section Beams: Cast-iron beams were usually simply-supported at their ends, and, in this condition, the lower flange had to be larger than the upper flange. With end-fixity, however, the negative bending moments, giving tension in the top flange, are of the same order as the positive moments. Thus the I-section beams with their equal flanges in the Boat Store are logical, as well as being more elegant than the traditional cast-iron section.

Plate Girders: The calculation of riveted wrought-iron plate girders was placed on a scientific basis by the classic research of Fairbairn and Eaton Hodgkinson in connection with the design of the Conway and Britannia tubular bridges, for which Robert Stephenson was engineer. This work was carried out between 1845 and 1847 and the results were published. No difficulty should therefore have attended the design of the girders in the Boat Store.

Corner Columns: A rectangular hollow section was, I believe, uncommon in the 1850s, although it later became widely used (for example, in most of the early Chicago skyscrapers). The device of allowing rainwater from the gutters to run down inside hollow cast-iron columns of circular section had long been practised.

Corrugated, Galvanised Iron: Corrugated iron had been employed in roofs since the 1830s and galvanising dates effectively from about 1840. The combined product came into extensive use soon afterwards.

Roof Trusses: Triangulated iron trusses can be traced back to a design by William Murdock for a roof erected in 1810 at the Soho Foundry, of 27-ft span. This form of construction received

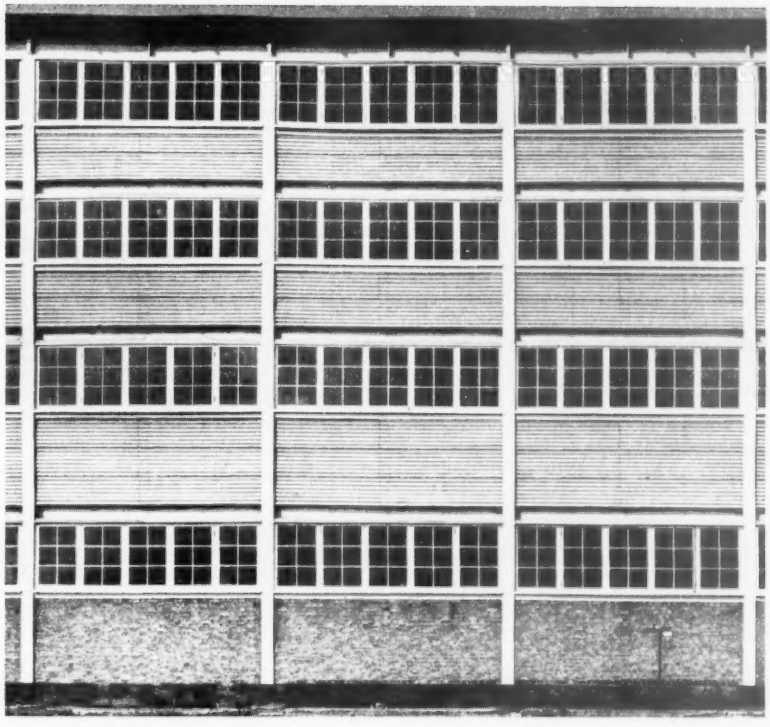
a great impetus with the advent of railway stations. The Boat Store roof can be admired for the appropriate differentiation between tension and compression members and the delicate detailing.

The Designer

The original working drawings are in Indian ink on imperial paper, headed 'SHEERNESS YARD, New Boat Store'. They are signed 'G. T. Greene' with the date and the letters S H which stand for Somerset House, where the Director of Works Department, Admiralty, was situated at this time.

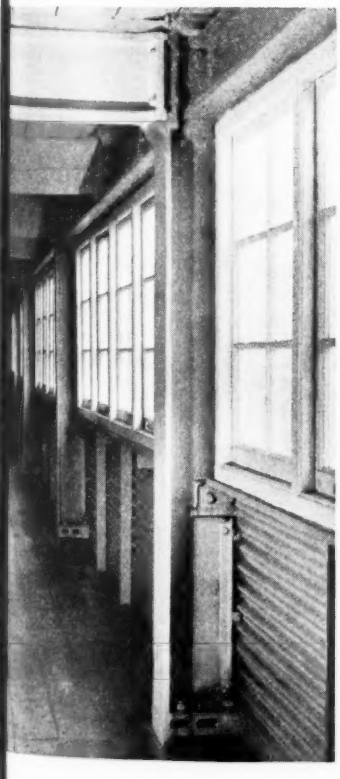
Who was Greene? Few will know his name, which is not mentioned in any publication dealing with structural or architectural history. Yet he made notable contributions to the design of early iron-framed structures: the great Smithery at Portsmouth (1851–52), the No. 7 Slip Roof at Chatham (1852–54) 300 ft long, 90 ft high to the ridge with a central span of 82 ft and H-section eccentrically loaded cast-iron columns with a free-standing height of 45 ft; and the Sheerness Boat Store which was his masterwork. From such buildings as these has evolved the steel-frame structure of our times.

Godfrey Thomas Greene (1807–86), the son of a Major in the Honourable East India Company Service, was trained as an engineer at Chatham under Sir Charles Pasley, FRS, and in 1826 took part in the siege and capture of Bhurtpore. He served in India, carrying out canal and building works, until 1849 when he retired to England, with the rank of Colonel, and was appointed Director of Engineering and Architectural Works, Admiralty: a post he held until 1864. Researches by Miss Carlotta Hacker and myself have proved that Greene was personally responsible for the designs of the dockyard structures, and we have found several of his sketches of landscape and buildings which show some real artistic talent. His great-niece, whom we have met, remembers 'Uncle Godfrey' as a kindly but reserved old gentleman, then living in retirement at Eastbourne.



Part of the south elevation. The original fenestration consisted of four sash windows across each bay, instead of the present five casements. The I-beams have webs stiffened with raised panels, which also gives a decorative effect.

The inside of one of the main walls at second floor level. The bolted junction of the two parts of the external columns can be seen just above the floor.



The Contractor

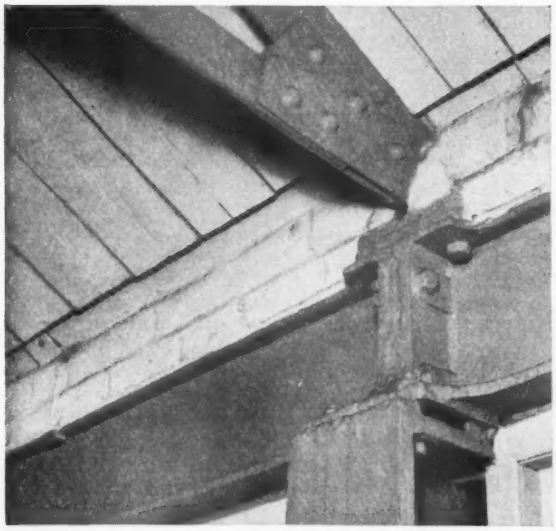
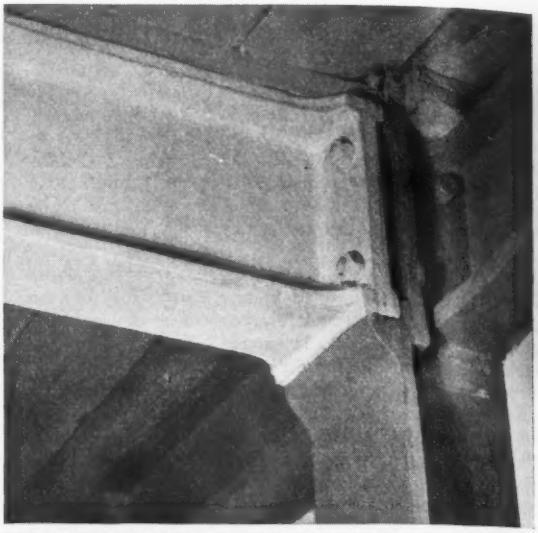
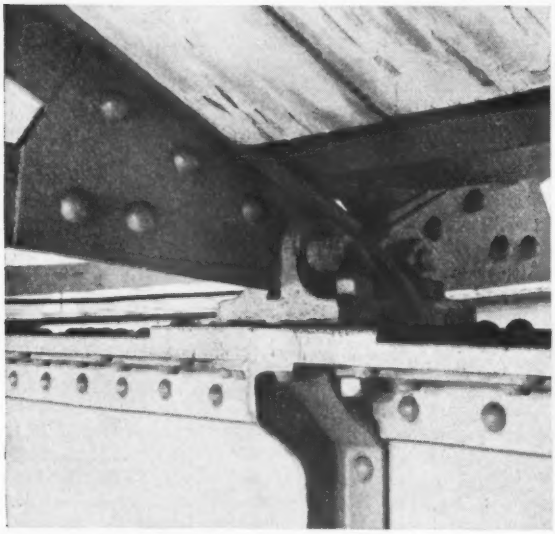
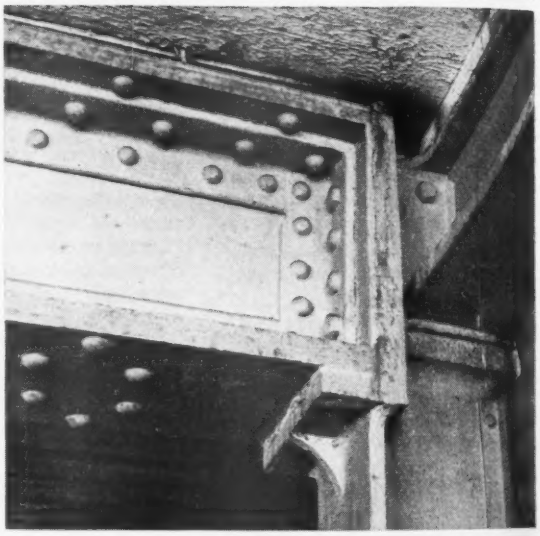
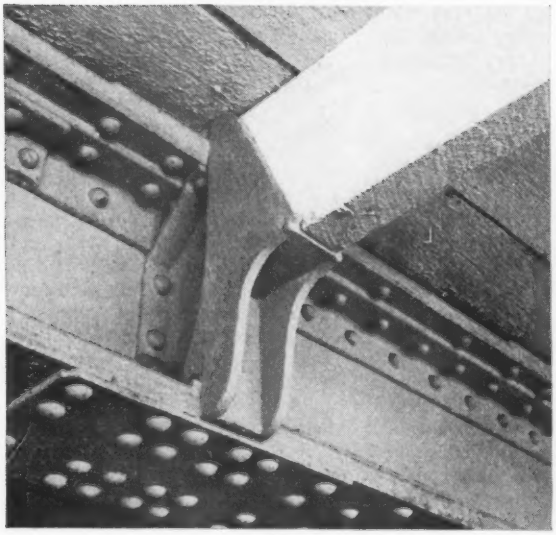
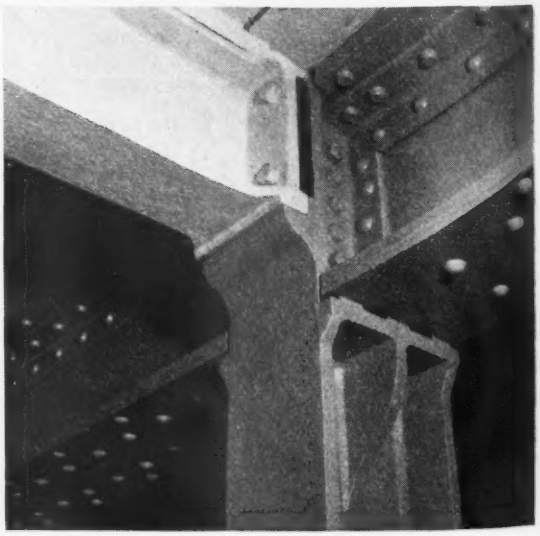
The entire design was completed, the estimates invited, the contractor appointed and foundations begun during 1858. By July 1859 the structural ironwork was up and a year later the contractor's final payment was authorised. The reasons for adopting an iron-frame building are not given in the available documents, but there are at least three evident advantages over a brick-wall building: (1) speed of construction, (2) larger windows giving better light, (3) smaller foundation loads, particularly important in swampy ground like that of the dockyard where every building had perforce to rest on piles. (The older buildings at Sheerness with load-bearing walls had massive inverted arch foundations supported by a great number of piles.)

The main contract was awarded to the firm of Henry Grissell, who became well known as an iron founder, machinist and contractor for structural iron under the nickname 'Iron Henry'. A pupil and assistant to John Joseph Bramah, he set up a partnership with his brother Martin and started in business in 1841 at the Regents Canal Ironworks, Eagle Wharf Road, Hoxton, on the south bank of the canal along which, no doubt, the castings and 30-ft girders of the Boat Store would later be shipped and thence down the Thames to Sheerness. One of their earliest big contracts was the iron roof over London Bridge Station in 1844, and, at about the same time, they were engaged to supply the iron floors and roofs of the new Houses of Parliament.

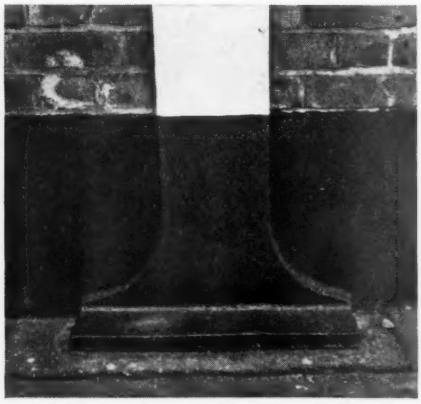
Robert Stephenson 'had a very high opinion of Mr Henry Grissell, which was reciprocated with the greatest veneration', and several of the great engineer's bridges were fabricated at the Regents Canal Ironworks. Some idea of his character is conveyed in the obituary notice in the *Proceedings* of the Inst. Civil Engineers of 1883: 'No man could be more devoted to his business than was Henry Grissell. . . . He scarcely ever had a contract but he must do something, at his own cost, to improve the details. . . .'

The workmanship of the Boat Store

Some of the internal junctions. *Top left*, roof truss and external column. *Top right*, I-beam and external column. *Centre left*, hinged roof trusses and longitudinal plate girder between aisle and nave, seen from an aisle. *Centre right*, floor girder and external column on side elevation. *Bottom left*, plate girder and timber joist. *Bottom right*, aisle column, plate girders and I-beams.

The bases of the external columns resting on granite slabs above the piled foundations. *Left*, the square corner column; ***right***, an intermediate H-column.

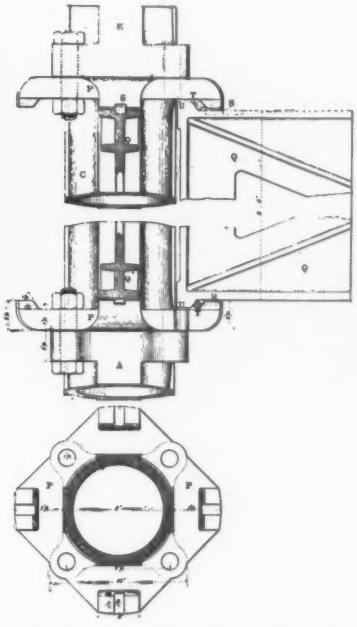


is first class, and fully justifies the high opinion held of Grissell by his contemporaries. It is pleasant to recall that Greene advised not enforcing the penalty of £10 a week for delay in completing the contract, 'as great exertions at great expense were made, and the delay caused no inconvenience'. In fact Grissell was only about ten weeks behind what must have been a very tight schedule.

Evaluation

Our knowledge of structural ironwork in the mid-19th century is far from complete, yet four claims can be made for the Sheerness Boat Store with some confidence. (1) It is a very early example, and almost certainly the first surviving example, of a multi-storey building having a complete iron framework. (2) It is, so far as we know, the first of such buildings to use simple H-section columns and beams, in contrast with the more elaborate and decorated forms typical of the period. (3) It is the first example of portal bracing with rigid joints – that is, of structural continuity in the modern sense. (4) It has an aesthetic value comparable to its structural interest, which makes it a prototype of modern architecture at its best.

Connection between beams and column in the Crystal Palace (from Downes and Cowper 'The Building for the Great Exhibition' 1852). 'The connections in the Crystal Palace, although ingenious, were clumsy compared with those of the Boat Store.'



The roof truss of 45-ft span of one of the aisles. Note the logical entasis and cruciform section of the compression members.

(Advisedly, Dr Pevsner has included it in the new edition of his *Pioneers of the Modern Movement*.)

A mere eight years later than the Crystal Palace, the Boat Store seems to belong to a different age. The details are admirably conceived and executed, bearing comparison with the best work of today, such as that by Mies van der Rohe and Frank Kornacker in the Lake Shore Apartments in Chicago of 1950–51. The elevations are also of highest quality: crisp, orderly, well proportioned, and displaying a sensitive use of materials.

The earliest multi-storey building constructed with a complete iron frame, and therefore depending on portal bracing for lateral stiffness, was possibly the four-storey factory erected 1848–49 at the corner of Centre and Duane Streets, New York, by James Bogardus. But that was demolished in 1859 and no detailed drawings of it have come to light. By comparison with the Boat Store it was a period piece, if we are to judge from Bogardus's US Patent of 1850 for 'The Construction of the Frame, Roof and Floors of Iron Buildings'. Several multi-storey buildings were erected in the 1850s in which iron framing was used throughout the interior and in one or two external walls, but the other walls were of brick and these solved the problem of stability. The importance of the Crystal Palace is beyond all question, for it was the first great rectilinear iron-frame building; yet it was not strictly a multi-storey structure and it certainly had no resemblance to a modern steel-frame building. The South Kensington Museum ('The Brompton Boilers') of 1856 was little more than a large, temporary, triple shed with mezzanine galleries. Then, suddenly, we find at Sheerness a completely iron-frame building almost in the modern idiom, structurally explicit and with entirely logical detailing, yet attractive, even beautiful, in the functional tradition of the old water mills of East Anglia and of the timber-framed and boarded sheds in the dockyards themselves.

It is, I think, the designer's greatest contribution that he developed this synthesis of the older, reasonable, style of the millwright and shipwright with the new possibilities of structural iron.

The plaque cast into the corner columns.

The UK School exhibited at the Milan Triennale, 1960.

Lessons to be learnt from the UK Schools Programme

At a time when architects from all over the world are meeting in London to discuss *new techniques and materials* it is worth setting aside a little time to consider the contributions made by our own country. Developments have been taking place in all types of building but the reputation achieved by the Schools Programme must be considered as something rather special.

The Schools Programme dates from the end of the war. At that time there was a shortage of most materials, particularly steel and timber, and bricks were needed for housing. To balance this there was an air of enthusiasm and inventiveness among young architects whose academic training had been interrupted, men whose design ability had been concentrated on such problems as camouflage and aircraft.

Since then we have built 3,250,000 school places and despite the ever-increasing rise in the cost of living this has not been reflected in the cost of school building. The success of these schools is not due to the use of expensive materials, to luxurious planning, but on the contrary to solving carefully studied educational needs within a restricted budget.

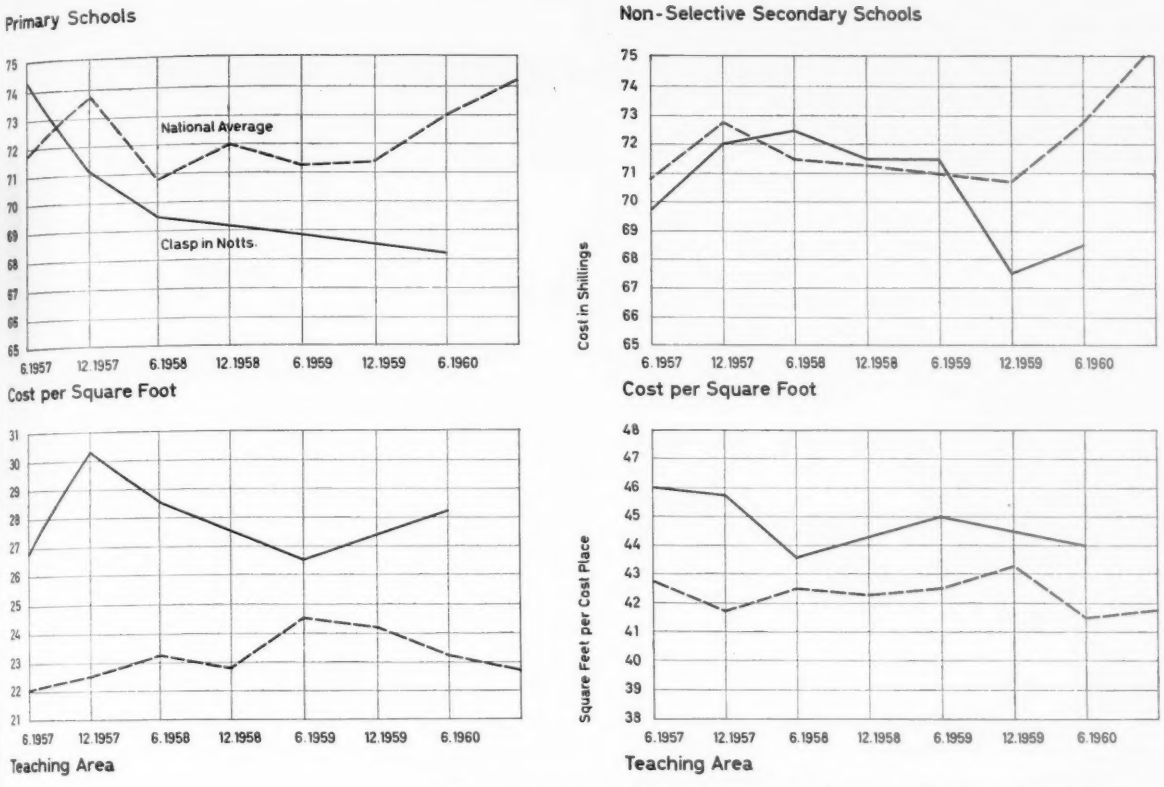
Fifteen years of planned school building has done a great deal to promote architectural design in this country and to enhance the reputation of the profession. The machine behind this programme is suited to the times and works smoothly and efficiently. It is accepted that there is an orderly and reasonable procedure which is rewarding both to architects and to the county for which they build. It is this organisation which has made technical advances possible, advances which, in some cases have been adopted in other fields, but in others have been prevented by the restrictions imposed by outmoded forms of building control, and for the lack of planned programmes which allow of standardisation, bulk ordering and detailed study of user requirements. Why is this? Are there lessons to be learnt from this programme which would lead to even greater advances?

Many of the lessons of the Schools Programme have still to be learnt. In this article some of the lessons to be learnt are described and it is suggested that the time is now ripe for the history of the Schools Programme to be written.

Lessons in terms of organisation, economy and relationships are propounded in Elizabeth Layton's book *Building by Local Authorities*. But far from all the lessons have been learnt, and more, which specifically affect architects, have still to be stated. A positive 'history' of this programme needs writing not in a short article like this but in a publication where all aspects can be considered and carefully balanced. Perhaps this would be one of the most worthwhile subjects for a research scholarship. These notes might suggest some of the lines of thought which need investigating and documenting. To be of value such a 'history' needs to draw from the experience of the programme and to pin-point the lessons to be learnt.

A planned programme

Probably the most important feature of



The graphs show how in Nottinghamshire, which is a part of the CLASP consortium, the cost per square foot is now well below the national average. They also show that this has not been achieved at the expense of reduced teaching areas. On the contrary the teaching area provided is higher than the national average

the Schools Programme is that it is a real programme, it is a planned operation in which the participants are aware well in advance of the nature of their commitments. This is certainly true of the local education authority and of the local authority architects. It is unfortunate, however, that private architects do not always share all the advantages. It is very convenient and economic for some local authorities to use private practice as a safety valve, and to be able to hand out work which they cannot do or do not wish to undertake. But advance notice to private practices of the amount of work likely to come their way even in general terms would enable the private architect to plan his programme in the same way as local authority architects. One of the greater difficulties in private practice is the lack of knowledge as to what work is coming. It should be possible for a well-organised client organisation to give advance warning, and of all clients the education authority is in the best position to do this.

Building regulations

Educational buildings are exempted from normal bye-law approvals. The Ministry of Education's building regulations set out minimum standards of space, hygiene, servicing and so on. They are drawn in broad terms and largely define ends, which allows authorities and their architects the freedom to decide the means by which they are fulfilled. This freedom gives architects scope to find appropriate, economical and often novel building solutions to the authorities' educational problems.

The regulations are known before any work on a project starts and they remain unaltered during the design and building stages. In this knowledge the architect can go ahead in confidence. The regulations are such, however, that they can be kept up-to-date and what is most important is that they are supported by advice in the form of Building Bulletins. For visitors to this country a complete list of the Ministry of Education Bulletins is given at the end of this article.

These two principles; written regulations supported by written advice could and should be adopted for the control of all building irrespective of type. A major reappraisal of building control is underway at the RIBA and the question that arises as a result of the Schools Programme is how is it possible that schools can be built efficiently, economically and with the use of new materials and techniques when similar building for other uses would in many cases be forbidden under existing legislation?

Standardisation

Directly one is concerned with the design and construction of a series of similar buildings over a period of time one can take advantage of the lessons learned in one year to improve the buildings of the following year. It is also possible to standardise both office procedures and building methods. Standardisation is almost considered to be a dirty word in some places. In fact it represents a rational approach to design in which unnecessary variation in sizes, materials and detail are eliminated with the obvious attendant reduction in costs. It can also fulfil its proper definition in the sense of the establishment of recognised values. The lack of standardisation all too often means that the relative values of different components and methods are left to chance. Standardisation of components and of the drawings for such components has in fact led to their more efficient use and leaves more time for the architect to devote to other aspects of his work. Again the benefits and limitations of standardisation whether it is at national, regional or at office level needs much more consideration.

Modular Co-ordination

The standardisation of building components necessitates a decision on size

and such a decision has to be taken in relation to the sizes of other components and their positioning. Throughout the Schools Programme planning grids have been widely used and much has been learned of the technique involved in their use. For a long time it has been appreciated that the planning grid is an invaluable tool as used in one office, by one manufacturer or by common agreement by a group of offices or manufacturers. But a national or even international system for co-ordinating dimensions needs to be adopted if components are to be readily exchanged between groups. This has become a particularly thorny problem. What can be said is that a Standard is needed and it is needed urgently now.

Technical advances

A great number of the technical advances made since the war originate in the Schools Programme. Many of them are due to the size of orders which can be placed. Modern production is dependent on good steady production runs and architects working with technicians have been responsible for the improved quality of goods in many spheres. It is essential that we exploit new materials and techniques and not they us. In many fields there are far too many alternative products, which are of indifferent design and unrelated one to another. Smaller ranges of well designed, co-ordinated products produced in larger numbers would give the building industry a more economic and efficient vocabulary with which to work. Each range would itself be required to be designed within a known price range which would help architects to secure consistent value for money in any type of building. The Ministry's pioneer work in Cost Planning which provides a basis for comparing the costs of the different elements of a building needs extension to all fields of building.

Contract procedure

Existing contract procedure can always be criticised on the grounds that it creates a schism between designers and constructors. The Victorian concepts of tendering developed to safeguard clients and their money have an unfortunate habit of acting as a boomerang in the 1960s. Many of the advantages are lost as a result of the disadvantages which the system brings with it. The possibility of tendering for a programme on the basis of the first school in the programme could lead to greater collaboration which would be profitable both to architects, builders and particularly to their clients. Once more this is a subject which needs, and is receiving plenty of thought; perhaps the concept of a programme of buildings offers a way forward.

Consortia

Architects are responsible in this country for the design and supervision of something of the order of £700 to £800 million of buildings each year. This is an enormous responsibility and one for which the profession has to be organised. One method of meeting the ever increasing responsibility is the establishment of consortia of which the forerunner is CLASP (Consortium of Local Authority Special Programmes). The Consortium consists of a number of local authorities who pool their resources. Drawings for components are standardised between offices. But this standardisation never extends to the planning of schools, where complete freedom is left to the architect to satisfy the needs of his clients, the site and so on. One of the many advantages of this approach is that orders for materials are of such a size that manufacturers are able to plan their programmes in advance as well as the architects. Another, which is well illustrated by the graphs, is the potential saving of building costs.

The next step would appear to be the establishment of similar consortia of private practices.

User requirements

In the design of all types of building one can divide the architect's expertise into two kinds: his wealth of knowledge on planning and construction common to all types of building and his ability to expand his knowledge to take account of the special conditions required in each individual building. For the specialist knowledge in particular he is dependent on close collaboration with his client. Here the work of the Ministry of Education Development Group is of vital significance and the precedent created is for such a Group to exist at all, for it to advise not only from experience gained through contact with those who build but by building itself and by the publication, in meticulous form, of advice resulting from experience.

ANTHONY WILLIAMS [4]

Ministry of Education Building Bulletins

1. New Primary Schools (Second edition 1955).
2. New Secondary Schools (1950).
2a. New Secondary Schools: Supplement (Second edition 1954).
3. Village Schools (June 1961).
4. Cost Study (Second edition 1957).
5. New Colleges of Further Education (Third edition 1959).
6. Primary School Plans (1951).
7. Fire and the Design of Schools (Second edition 1955).
8. Development Projects: Wokingham School (1955).
9. Colour in School Buildings (1953).
10. New School Playing Fields (1955).
11. The Design of School Kitchens (1955).
12. Site Labour Studies in School Building (1955).
13. Fuel Consumption in Schools (1955).
14. Day ESN Schools (1956).
15. Training College Hostels (1957).
16. Development Projects: Junior School, Amersham (1958).
17. Development Projects: Secondary School, Arnold (1960).
18. Story of CLASP (June 1961).

Correspondence

The Editor, RIBA JOURNAL

Modern Architecture and the Historian

Dear Sir, – Those who attended Professor Pevsner's lecture, or read it in the April JOURNAL, will remember his main point – that the recent outburst of free and sculptural shapes in architecture is historicism, an imitation of a past style. If this is all it is, few will quarrel with the conclusion that it is a retrograde movement.

No one at the time challenged the basic assumption that this work is merely an imitation of a past style, that it *is* historicism.

First, historicism, surely, is an imitation of a style which is past *and also dead*. Is it reasonable to assume that a style which began at the beginning of our own modern age is dead? If buildings which have similarities to Art Nouveau or Expressionism are accused of historicism (and called neo-), so equally can buildings which are in the spirit of the early functional architecture also be historicism. Professor Pevsner for instance does not call Lever House *neo*-Functional.

It would seem to fit the facts better to see two streams in contemporary architecture, neither of them dead and neither (except in the lesser examples of both) imitative. One, the 'rigid', began with the engineering and early functionalist architecture and continued unbroken to today. The other, the 'riotous', began with Art Nouveau and has continued in a rather more sporadic way until the prolific outburst of the last decade.

It remains to be seen which will develop into the future.

It is possible that a middle way will resolve the problem for the future. Here the ideas of Rudolf Steiner (whose birth centenary is being celebrated this year) on architecture are relevant. Steiner gives an understanding as to why people of different ages build as they do – including why we have this dual stream of the rigid and the riotous. A study of Steiner's ideas suggests

why movement of line and sculptural form belong to architecture today and why modern man needs this kind of building. But it also shows why this freedom must be within a certain discipline and must not become anarchy.

In the Goetheanum near Basle, Steiner produced a building which was but a first esquisse in the direction that he thought architecture would develop during the 20th and 21st centuries. But he gave ideas and stimulus for a lot of architectural thinking and development.

Above all, he suggested a way through the schizophrenic condition which Professor Pevsner pictured so vividly in his lecture.

Yours truly,

KENNETH BAYES [*F*]

Well illustrated articles on Rudolph Steiner's buildings were published in Nos. 55 and 56 of *L'architettura* (No. 56 deals with the second Goetheanum), which may be seen in the RIBA Library.—Ed.

Sir, – I believe that there are a great number of us who are very thankful to Professor Pevsner for an extremely interesting and informative talk on 'The Return of Historicism', published in your April issue, but there are certain very thorny problems requiring comment. These concern questions of originality, sincerity, and the legitimacy of style.

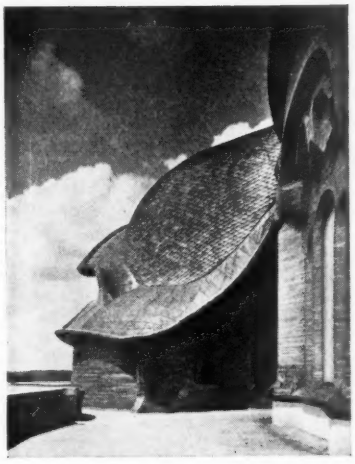
A phenomenon rare almost to the extent of non-existence is an architect able to be free from stylistic influence. Such a person cannot only think, but also feel for himself, so that the form of the buildings for which he is responsible may bear no taint whatever of the stylistic intentions of others, but may clearly embody and demonstrate only such thought, feeling and experience as he intends. But since for the majority of us a choice of influences is the best that we can hope for, great importance attaches to the motive which directs this choice: to impress, to conform, to satisfy a client, to make a functional statement or a geometrical statement, to exploit a material or a structural system. These are a few motives of different value which can affect a choice of influence and much else as well.

Now if we allow that form and space exist to be discovered and developed, as musical sound is discovered and developed, or as the nature of matter itself is investigated by physicists, then surely it is legitimate to pick up the threads of an investigation left unfinished, say 50 years ago? If the aim is to gain understanding then surely this would be more valuable than to copy last year's building because it is considered respectable.

If Professor Pevsner is complaining of aesthetic anarchy, one cannot but agree, but surely the tyranny of a style is no alternative.

Though the International Style was based on a scientific approach to planning and structure, its aesthetic aspect came to be fixed within artificially narrow limits, and so to obscure thought on economy and performance and to obstruct natural development of style. So we can hardly find here an objective criterion for judging the form of works not conforming to this style.

What one hopes for, perhaps, is 'a rule so broad as to admit no exception', but this cannot be achieved until aesthetics are treated as scientifically as structure now is.



Above and right: The second Goetheanum, general view and detail. *Left:* The first Goetheanum, destroyed by fire in 1922 (see letter from Kenneth Bayes)

This entails on one hand a thorough assimilation of all relevant knowledge of the human being and human modes of perception in relation to the world as a whole, and on the other an acceptance as such of the unknown, which includes, of course, much that is irrational in man.

Yours truly,

S. L. MOLESWORTH [*A*]

Architectural Education

Sir, – Mr Pace's letter (April JOURNAL) contains an excellent analysis of one of the basic troubles of architectural education – that is, the gradual withering of the teaching of architecture as if it really was an art; I would like to comment on the implications of this situation more fully. His suggestions for a reorganisation of values so far as the Associateship and Fellowship are concerned are extremely interesting, and deserve further consideration by the profession.

It is necessary, however, to correct a fallacy so far as the recommendations of the Advisory Council on Art Education are concerned. What in fact is happening is that the single (externally examined) National Diploma in Design is being abolished, and every school of art organising courses to diploma level will in future offer its own internal diploma, the Diploma in Art and Design. Far from providing a uniform measuring stick, this is intended to give schools more freedom in organising their courses than was previously possible, and to provide for the maximum variety of approach. However, the Minister of Education intends that the educational standard of the new diploma courses shall be raised to degree level, and all proposed syllabus arrangements will have to be approved by an independent assessing body; in other words, the system seems to be modelled on our own method of recognising exempted schools from the Final Examination. As Mr Pace says, the Advisory Council's recommendations include an escape clause designed to let in students who are obviously outstanding in fine art subjects, but may, for this very reason, be incapable of doing well in a written exam. – surely a wise provision, and a necessary one in our own case, even if it must be used sparingly.

This brings me to my point. Is it not ironic that, at the same time that this Committee was considering removing one of the biggest barriers to co-operation between architectural and art education by raising the standard to degree level, the Oxford Architectural Education Conference Committee should express its view (for superficially attractive reasons) that universities are really the ideal places for schools of architecture to be situated? (I refer to paragraphs 20 and 21 of their report.) That is, where they will be isolated from any direct contact with the fine or industrial arts. This is abdication with a vengeance, indeed! . . . It is really perhaps the most revealing conclusion of this conference, and the one which up till now has drawn the least comment.

I am well aware that the faults do not all lie on one side. The old craft approach still apparent at too many schools of art undoubtedly inhibits the development of those arts, including architecture, involved with translation from drawing to complex techniques. This does not excuse us from thinking seriously about the implications of secession from the world of art by the isolation of our students from the cross-fertilisation so obviously and painfully missing from most of our schools today. Worse – the situation does not damage architecture alone. Cross-fertilisation works both ways, and isolation of an important section of the art world leads not only to inbreeding in that section itself, but to impoverishment in other areas too; so that

to the isolated architect the other arts may begin to seem less and less worthy of attention. Certainly from, say, the painter's viewpoint, architecture has become almost irrelevant. He no longer thinks of the average architect as a fellow artist, but as an odd kind of semi-technical businessman with laughably naïve ideas about his art, and an extraordinary and unjustified idea of his importance on the artistic scene. There is no doubt that we should begin to think seriously about whether or not we want to abandon our threatened artistic throne: and that should we decide on abdication, there is reason to suppose that the vacuum will be filled from elsewhere.

Yours faithfully,
C. FLEETWOOD-WALKER [*A*]

Sir, – I should like to give support to the views expressed by Mr George Pace, in the April JOURNAL.

It has seemed to me, for some time now, that the adoption of a stronger hierarchy within the profession, a firmer division into the ranks of Associate, Fellow and Master, would in due course lead to higher standards, both in dedication to service and overall technical efficiency. I believe that these are the only ways in which the status of the profession can be raised.

Whilst I agree with Mr Pace that the various existing methods of training ought to be encouraged and strengthened, I would go much further than he suggests in regulating entry into the first two ranks.

It ought to be more widely recognised that the possession of a Diploma in Architecture proves only one thing; which is the degree of interest of one student in the subject.

I would suggest that after a relatively short period – which could vary according to the method of training whereby the student gained his diploma – that candidates should be allowed to take certain further examinations, leading to Associateship. So that after some seven to eight years of combined school and office experience, say by the age of 24 or 25, a student would be entitled to the description 'Assistant Architect'. This term ought to be lawfully protected, in much the same way that the term 'Architect' is now protected by Act of Parliament; and moreover it ought to command definite status within the profession. At the same time, I would also suggest that at this stage in his career, the young Associate should be quite definitely debarred from calling himself, or practising as, an Architect.

Only after a further period, of perhaps seven to ten years, would an Associate be eligible for election to the Fellowship and the full title of 'Architect'. The conditions for this election ought to be stringent; and post-graduate research and further examination should be a necessary qualification for admission. It would be during this period that candidates would realise for themselves just where their higher aspirations lay and where their true intrinsic values resided; and they could then adjust their aims accordingly.

I am convinced that by this means some of the more pernicious side effects of a two-tier profession – which have often been commented upon by the editors of the *Architects' Journal*, and with whose views I strongly agree – would be eliminated. A basic education, common to all the members of one profession is essential: it is, I believe, the only way in which to produce coherent architecture, from first concept to final detail.

I also believe that such education is the key to any possible future reorganisation of the profession, and it seems to me that the adoption of the policy outlined above – and if I understand him right, in Mr Pace's letter – would have at least one benefit of great value. It would relieve the Schools of Architecture from one considerable burden of producing 'qualified architects'. They would then be able to concentrate on their main function, which is to provide a place where young people can – whether full-time students or not – receive a thorough grounding in the fundamentals of what is intrinsically an art form. The present five-year course is not altogether too long a time in which to achieve this end. The necessity for further education in more technical subjects is not in question, but I suggest that this ought to take place after the student has gained his Diploma; and be combined with the period of office experience. It would be at this stage, that an academic discipline would be most fruitful. The great dangers inherent in too great a concentration upon applied, as opposed to fundamental education, in the early stages of professional life are well brought out in Mr W. H. Whyte's book *The Organisation Man*. Some of the facts, and opinions expressed in this and similar books, seem particularly relevant.

Most of us would agree that it is time for a rigorous reappraisal of how a person can obtain the title of 'Architect'; and exactly what this description should mean, in terms of academic and practical qualifications – and the two are not synonymous – to the rest of society, from which we receive our status. These conditions for Associate, Fellow and Mastership of the Institute, could well be one way of forming and projecting a decent image of the profession, to our present and future clients.

Yours faithfully,
CHARLES SEWELL [*A*]

Criticism of RIBA Prizes

Sir, – Dick Sheppard's friends have long known his delight in being offensive, and love him none the less, but for the benefit of those not so privileged it may be well to correct some of the inaccuracies he wittily perpetrated in his Review of the Work submitted for Prizes in 1961.

'When I was at the AA we were always pressed to enter the Tite. Nobody did, we thought it a mark of disgrace . . . etc.' This is simply untrue. In Mr Sheppard's own year H. T. Cadbury Brown (Past President AA) reached the final of the Tite, and I would happily wager that not less than 30 of the year sat the en loge *esquisse*, though I have no access to the records.

'I was educated at the AA in the '30s.' This is true if Mr Sheppard regards his first three years spent at Bristol as contributing nothing whatever to his education, but not otherwise.

'We tried to avoid the staff and stick to books – very successfully because the staff generally tried to avoid us too.' Speak for yourself, Mr Sheppard, but I feel there will be others besides myself who regret and repudiate those words. If the laugh was cheap it was dearly purchased.

Yours faithfully,
HUGH P. CRALLAN [*F*]

Mr Sheppard's reply to Mr Crallan's letter

Dear Sir, – I am sorry to learn that Hugh Crallan thinks that I delight in being offensive, or that he feels the comments I made at the prize giving were so intended.

I am sympathetic to the competitors, who spend so much of their time on these prizes and competitions: indeed, looking through my remarks, I cannot see where I have been offensive to the competitors or unkind in my comments about the serious schemes.

At the same time, a critic's job is to maintain standards and if any of my comments seemed harsh, it is because I believe (as I know he does) that it is important that our standards in design must be maintained and improved.

Mr Crallan also accuses me of inaccuracies in some of my comments about the AA in the '30s. It is a long time ago, and I am sorry if I have annoyed him or anyone else. Nevertheless, those are my recollections.

Yours faithfully,
RICHARD SHEPPARD [*F*]

New RIBA Standard Signboards

Dear Sir, – I feel sure I will be one of a vast number of members to support M. Hartland Thomas and A. S. G. Blackmore. Like them I would ask – Why change at all? The original board was good. I only have a few but I intend to go on using them until they drop to pieces rather than get any of the new ones which I think can best be described as 'brash'.

Yours faithfully,
GEOFFREY L. PRICE [*A*]

Suggestion for Brains Trust

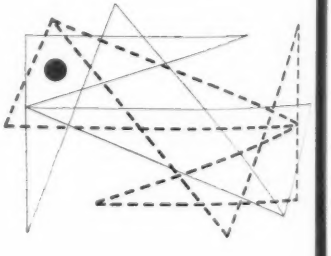
Dear Sir, – Emerging from the somewhat decorative scaffolding we now can see three great lumps of buildings on the South Bank of the Thames.

They are grouped round the Festival Hall like a posse of police round a holiday car with the luggage on the roof.

On the other side of the river we have a series of pre-war buildings ranging from the 18th century to 1939.

I suggest that the RIBA and the Town Planning Institute call a brains trust to be held on Waterloo Bridge, preferably in a stationary motor-bus, and let us hear what the experts have to say about the present and future prospects of contemporary London.

Yours faithfully,
KENNETH ANNS [*F*]



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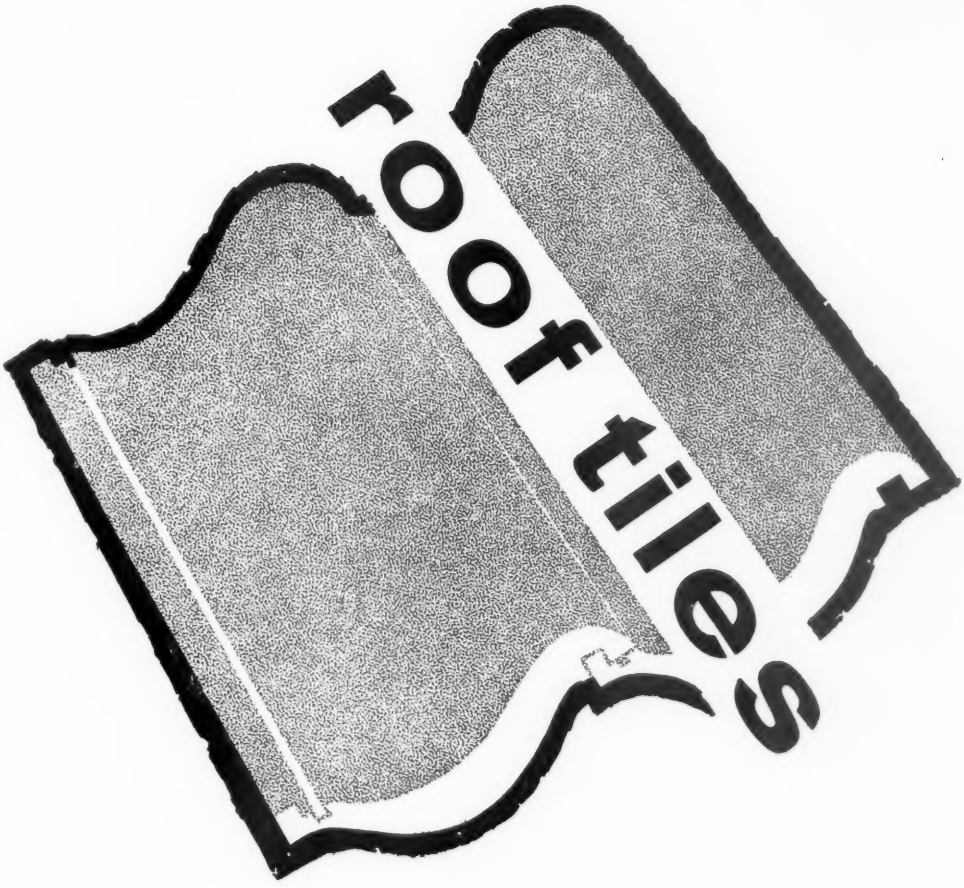

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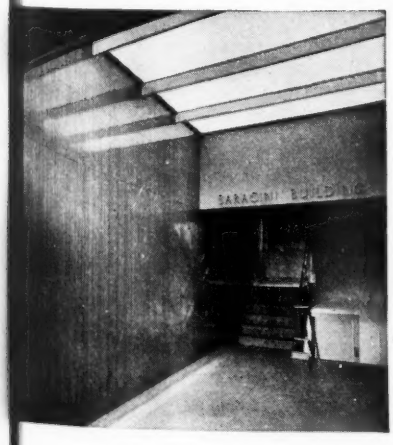

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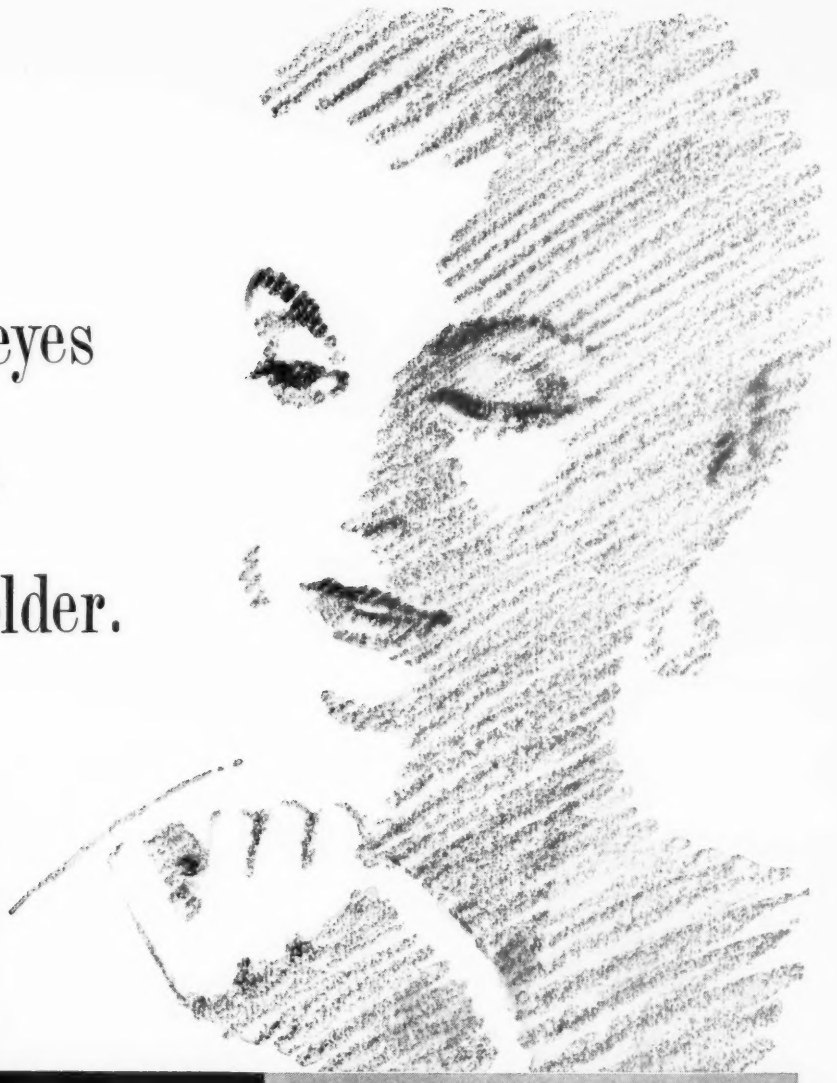

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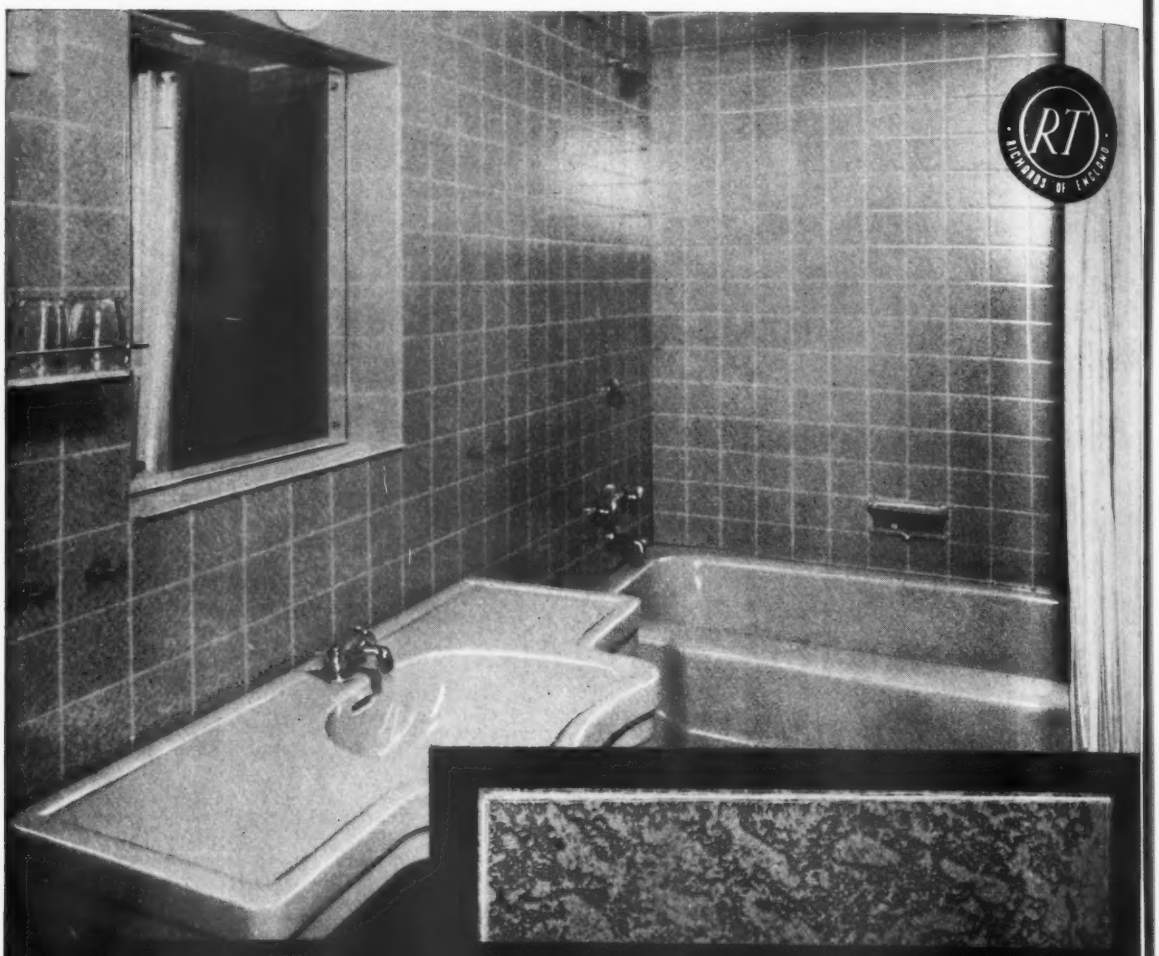

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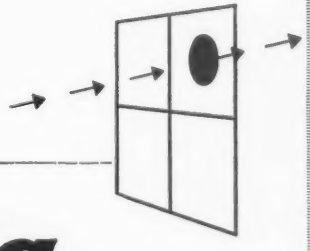

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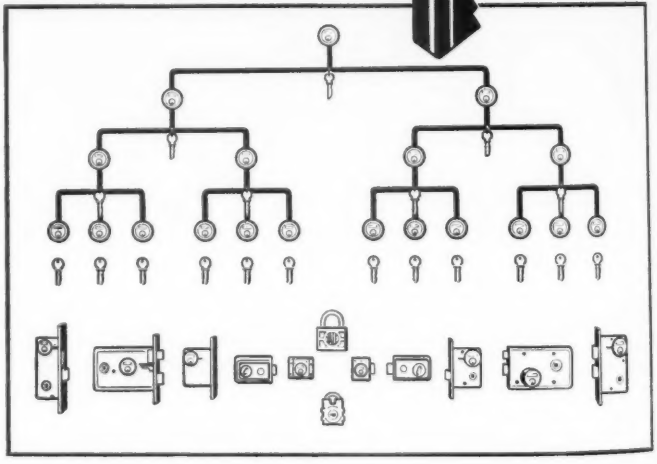

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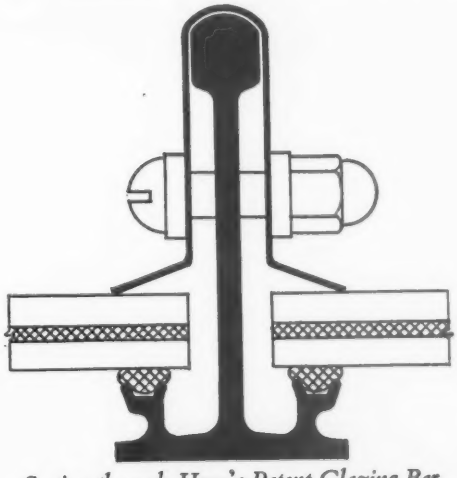
We also supplied the cast aluminium initial letters IBM which are 4 ft. high and set in a vitreous enamelled aluminium dished panel. Windows are hot-dip galvanized steel.



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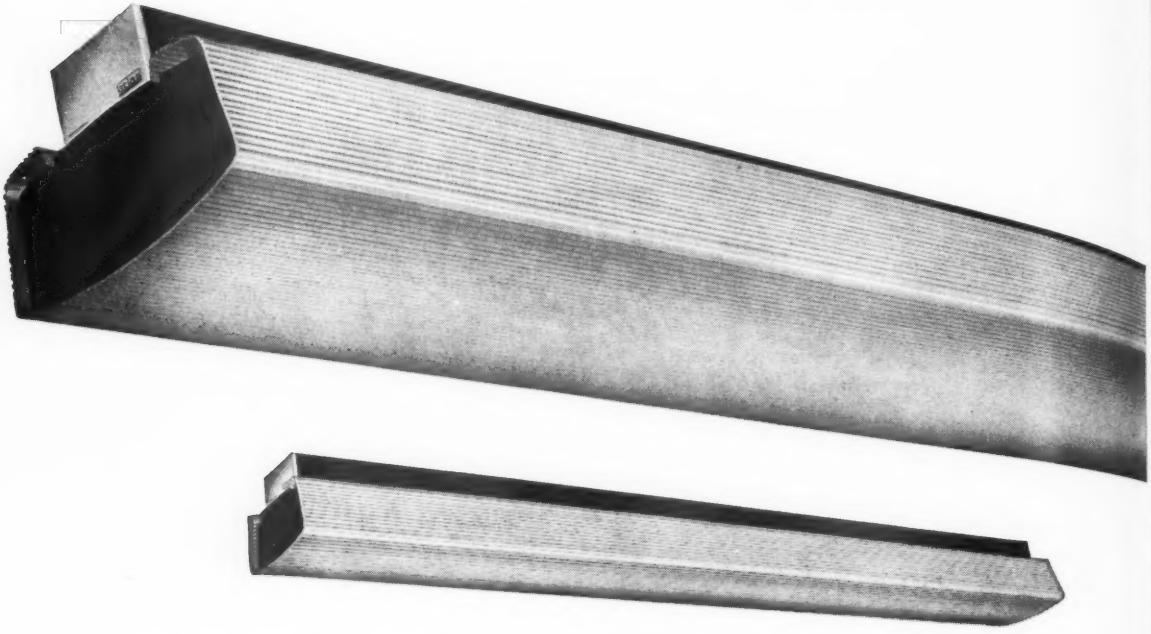

The AAB series diffusers illustrated, accommodating 1 or 2 x 80w. tubes, present economic, but very attractive, commercial lighting fittings. Extruded with a bold reeded pattern on the outside, the opal 'Diakon' diffuser has clip-in plastic moulded end plates in blue or white and is easy to clean. Price with QS gear for the twin version is £17.2.5 tax paid.

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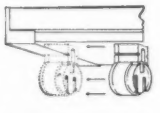

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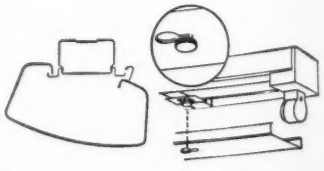

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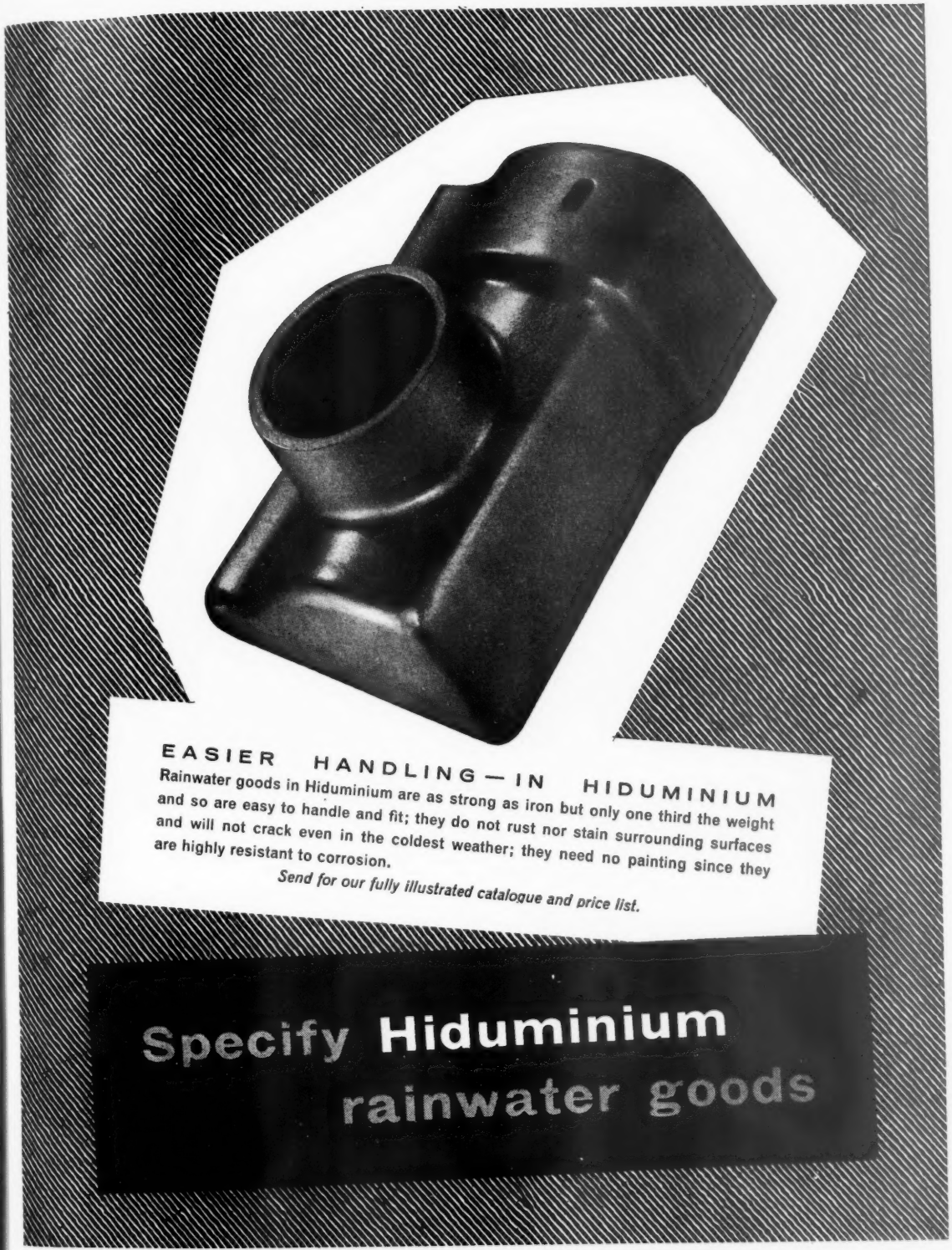
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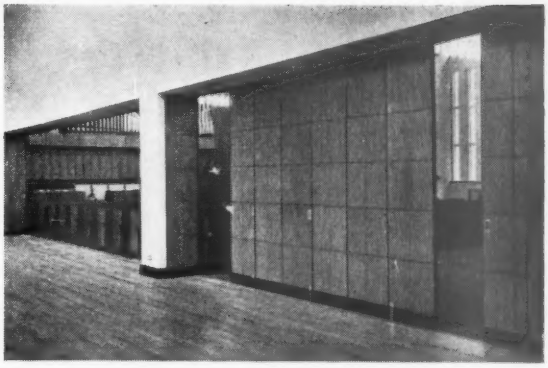

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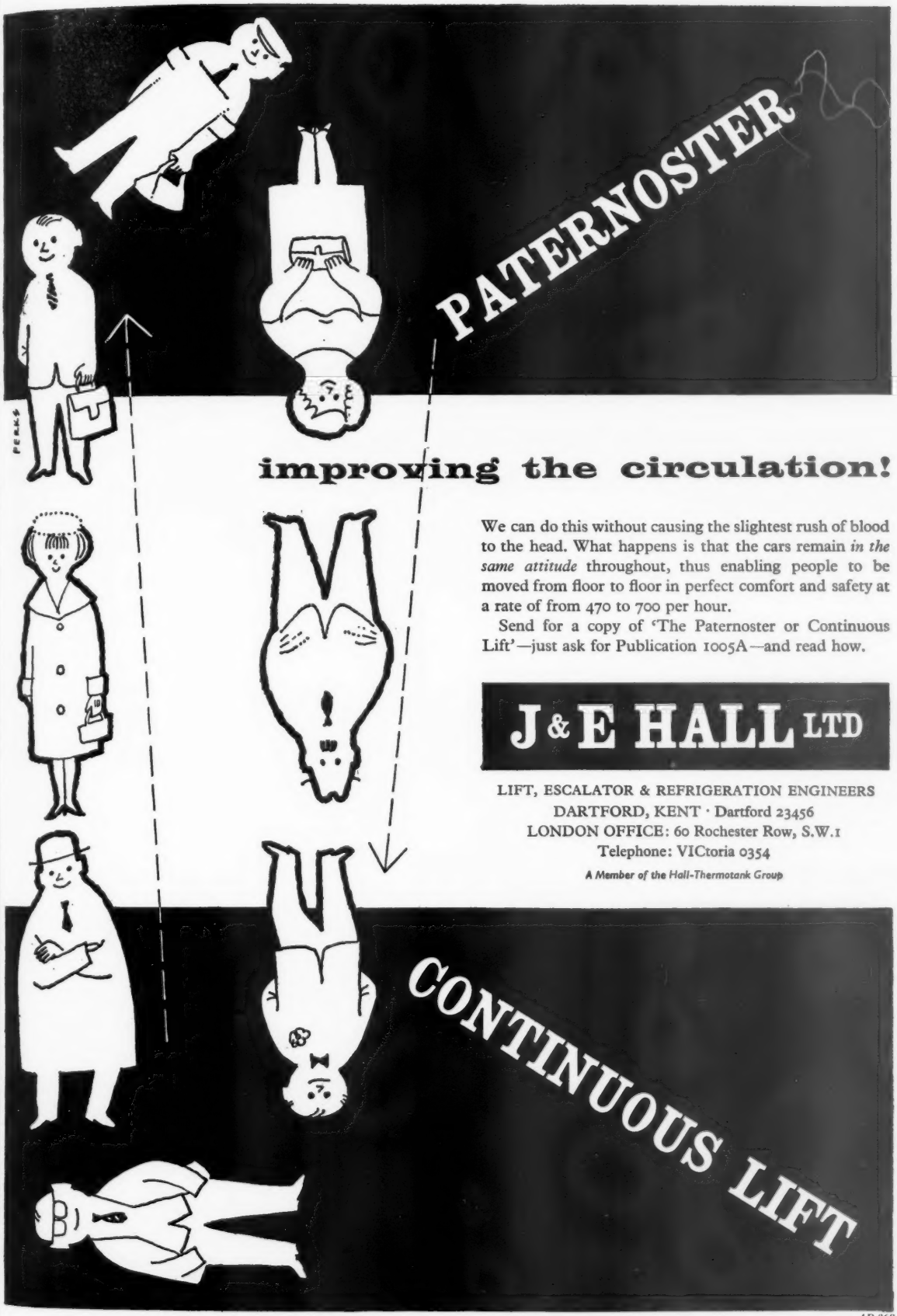

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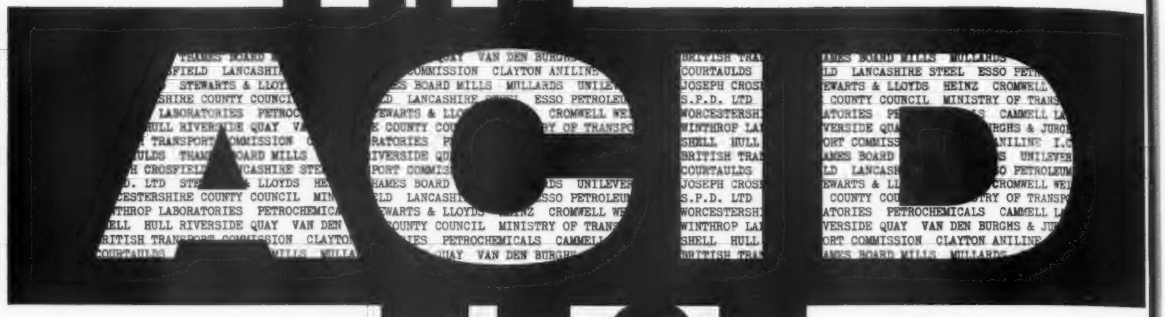

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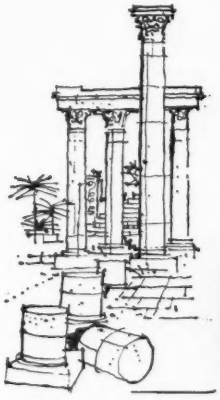

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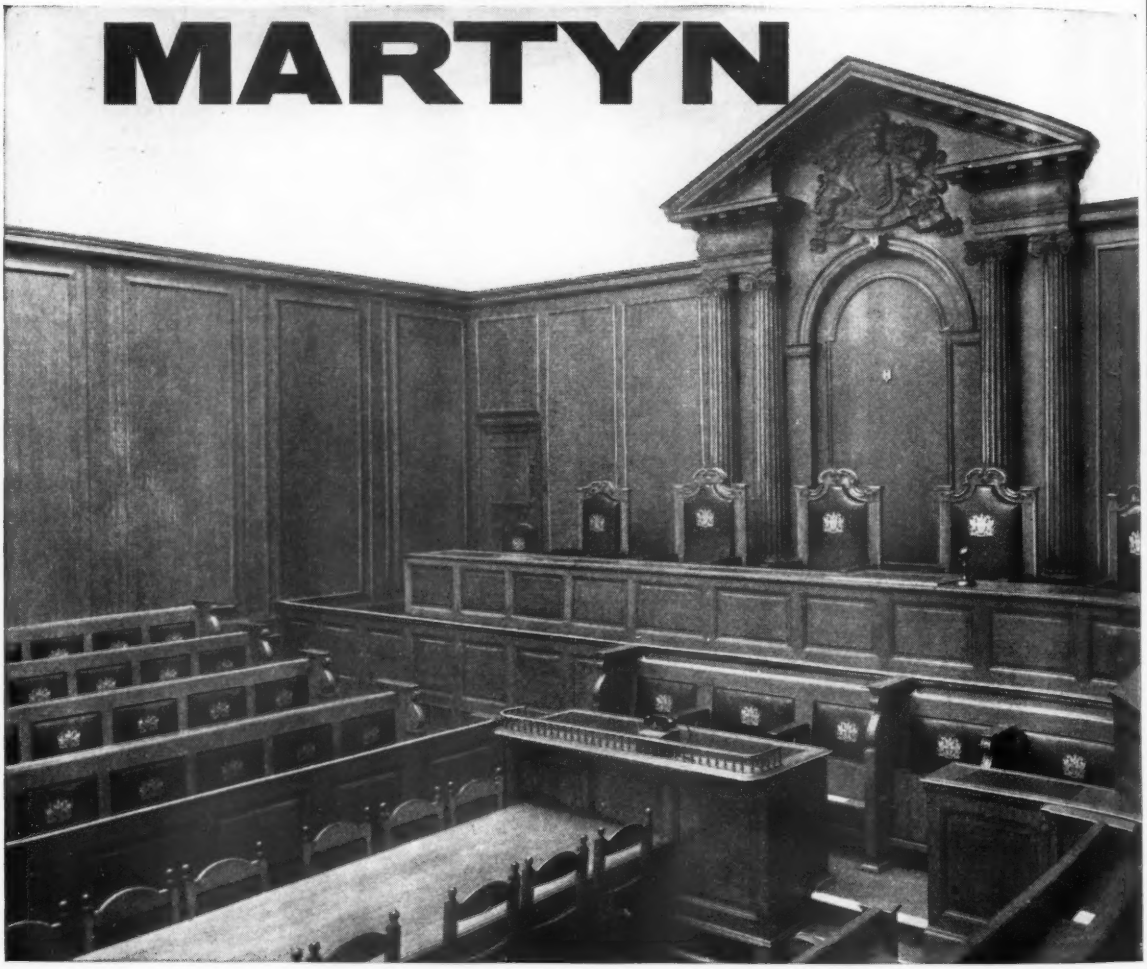

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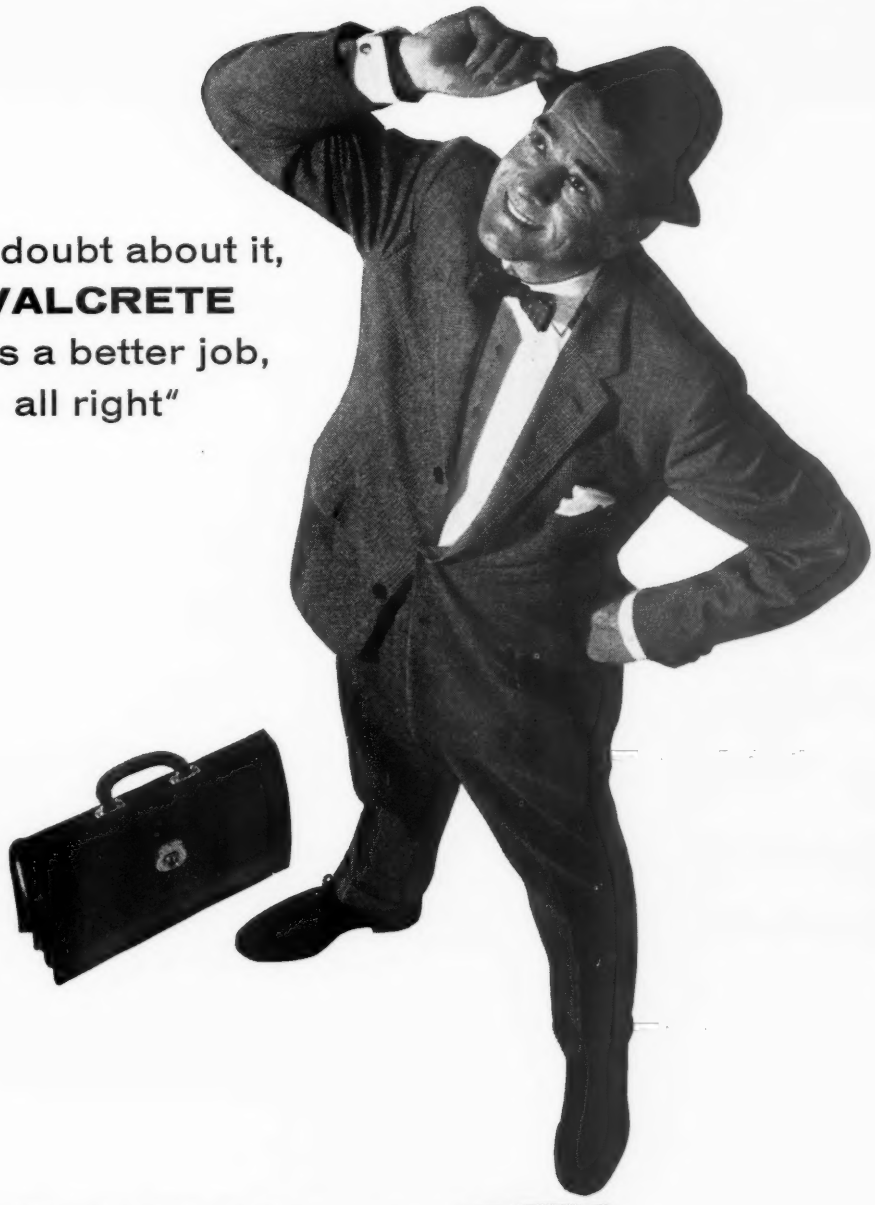

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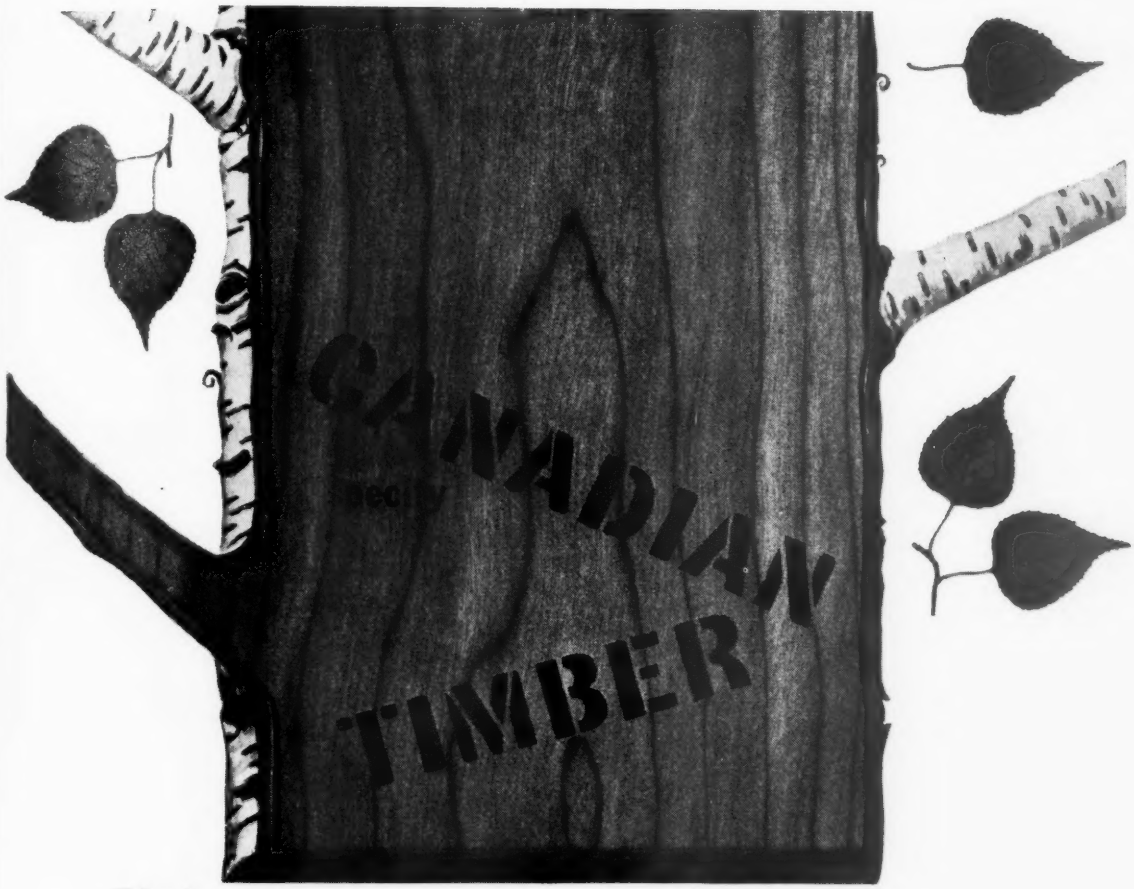
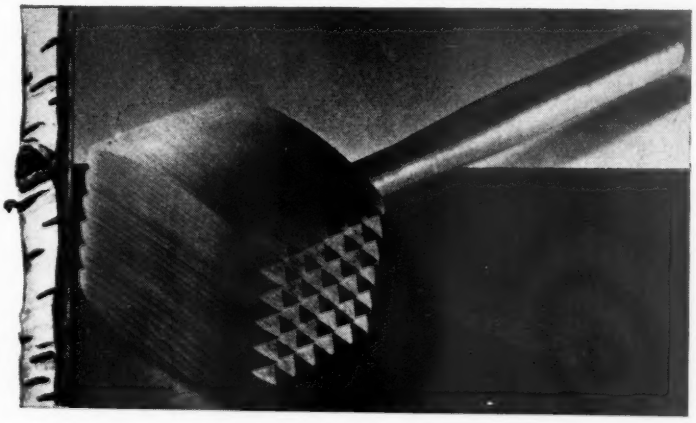


Birch Canadian forests produce a birch of exceptional height and thickness. As a timber, it is among the toughest and most popular of hardwoods. Canadian Birch has a good weight–about 43 to 44 pounds per cubic foot air dry–works easily, wears well and withstands mechanical stresses. Flooring, furniture, interior finish, veneers and plywood, agricultural implements and cabinet making these are just a few of the applications of this handsome timber. For further information about Canadian hardwoods please contact: Commercial Secretary (Timber), Office of the High Commissioner for Canada, No 1 Grosvenor Square, London W1, or The Canadian Trade Commissioner (Timber), 144 West George St., Glasgow, C2.



Lathe-worthiness : another strong point of Canadian Birch.

News from Hull

Luxury Flats and Offices in a Nash Crescent

'Standard' equipment used extensively

architects :–
FITZROY ROBINSON & PARTNERS

main contractors :–
TERSONS LIMITED

plumbing sub-contractors :–
ELLIS (KENSINGTON) LIMITED

A new block of luxury flats and offices will shortly be completed in Park Crescent, W.1 — the lovely crescent near Regent's Park, famous for its fine Nash houses. The west side of the crescent was heavily damaged by enemy bombing during the war, and to preserve the character of the crescent the frontage has been rebuilt exactly to the original Nash design.

The block, which has been developed by Portland Estates Ltd., provides over 55,500 square feet of office space. There are also on the site 92 luxury flats of one, two, or three rooms, kitchen and bathroom.

In each bathroom there is an elegantly styled 'Standard' Lowline bath finished with high quality porcelain enamel. The Lowline has three possible tap positions and hand grips are optional. The wash basin is the 'Standard' Kingston mounted on chromium plated legs (although it can be wall hung or fixed on a pedestal) made from durable vitreous china. The 'Standard' Kingston double trap siphonic low level closet suite, also of vitreous china, completes the sanitary fittings in these bathrooms. 'Standard' equipment has also been used extensively in the luxurious offices. Devonian wash basins, Vitural slab urinals and Sano wash down closet suites all made from vitreous china have been used in the washrooms.

The advantages to the planner of using 'Standard' equipment in offices and domestic dwellings are obvious.

Firstly, the equipment is well designed. Both the Lowline bath and the Kingston range are outstanding examples of all that is best in modern bathroom equipment. The Vitural slab urinal is a great advance in existing urinal design and is the first full length slab to be made from vitreous China.

Secondly, 'Standard' items are made from vitreous china. This is more hygenic than ordinary ware—as it is non-absorbent, it is impossible for germs to lodge and breed in it.

Thirdly, 'Standard' equipment is extremely durable. It keeps its good looks for many years and replacement is rare so that it is more economical in the long term than other equipment.

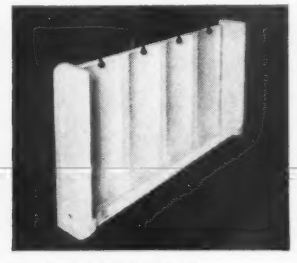
For these reasons 'Standard' sanitary fittings are being specified by architects for more and more hotels, public buildings, houses, factories, offices and schools, as each month passes.

546

The Lowline bath

The Kingston wash basin

The Kingston low level closet suite



The Vitural slab urinal

The Sano wash down closet suite

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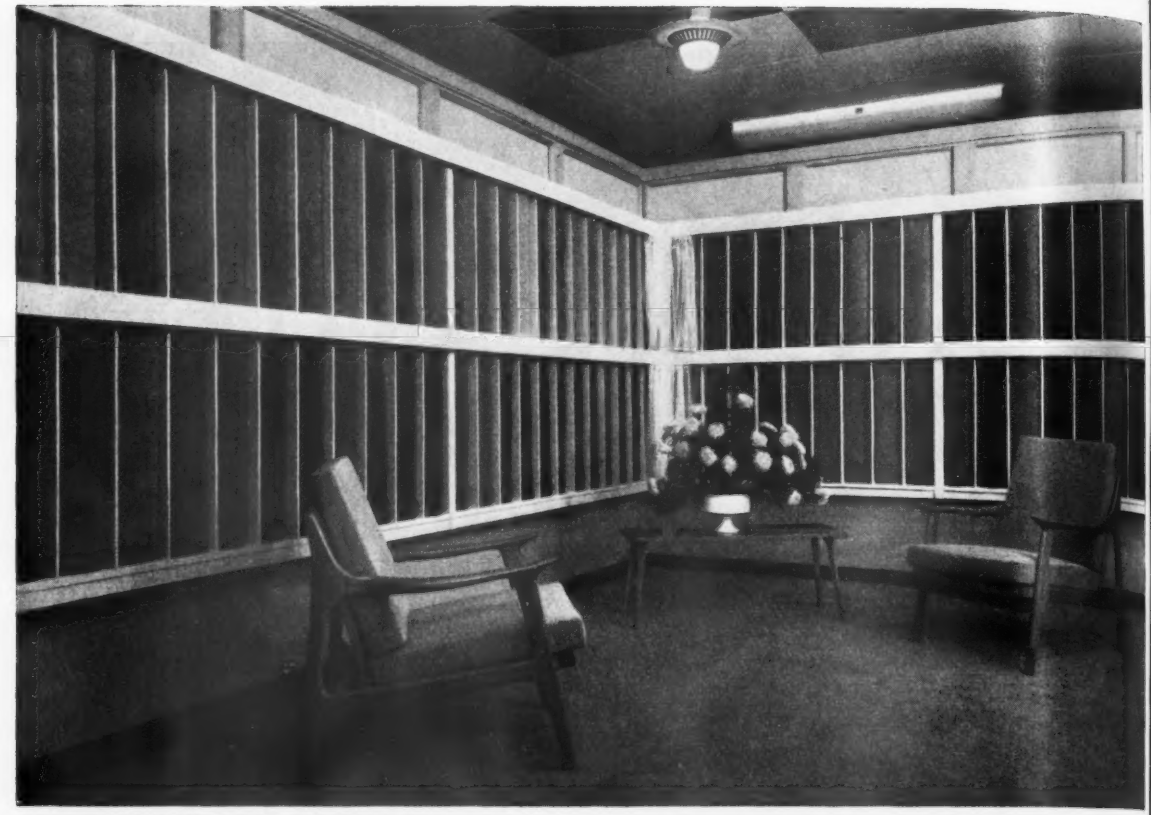

THE PEACOCK ROOM

AVH|ROBBIALAC Colour service for Architects and Interior Designers

The Peacock Room — in Farringdon House, the London premises of A. V. Humphries Ltd., leading carpet suppliers — is the first showroom of its kind in Europe. Its purpose is to provide both a centre and a service for architects, designers, decorators and builders. It puts on show the widest range of colours in plain carpeting and paints. In the Peacock Room, colours may be matched, blended, contrasted. Professional trade visitors may browse freely, consult their plans and use the seating and desk facilities. Over 300 rolls of plain Wilton carpet, a complete range of qualities in British Colour Council shades are on show in the Peacock Room. This is only the beginning of the service offered by A. V. Humphries. If a visitor does not find the exact colour he wants, it will be dyed, specially for him — in 27″ body carpet, to any length, in any quality — at no extra cost and delivered within three weeks. This enables precise colour specifications to be adhered to. Over the past year, about 2,500 different shades have been produced. Expert advice on choice of colours is always available from carpeting specialists in the Peacock Room.

More than 999 colours selected from the Robbialac Colorizer Paint System of Jenson & Nicholson Ltd. are also to be seen in the Peacock Room. Each carpet is accompanied by a double sided panel of Robbialac colours one of which blends and the other being typical of the many which harmonise or contrast with the carpet colour. The Jenson & Nicholson Architectural Service Bureau, offer colour schemes for all types of decoration. This service is free to professional and trade customers, and includes site-visits to determine the best schemes. Alternatively, a member of the Bureau will attend at the Peacock Room by appointment to help with the choice of colours in relation to carpets and surfacing materials.

You are cordially invited to visit the Peacock Room at Farringdon House, Warwick Lane (Off Newgate St.) E.C.4. Enquiries to:

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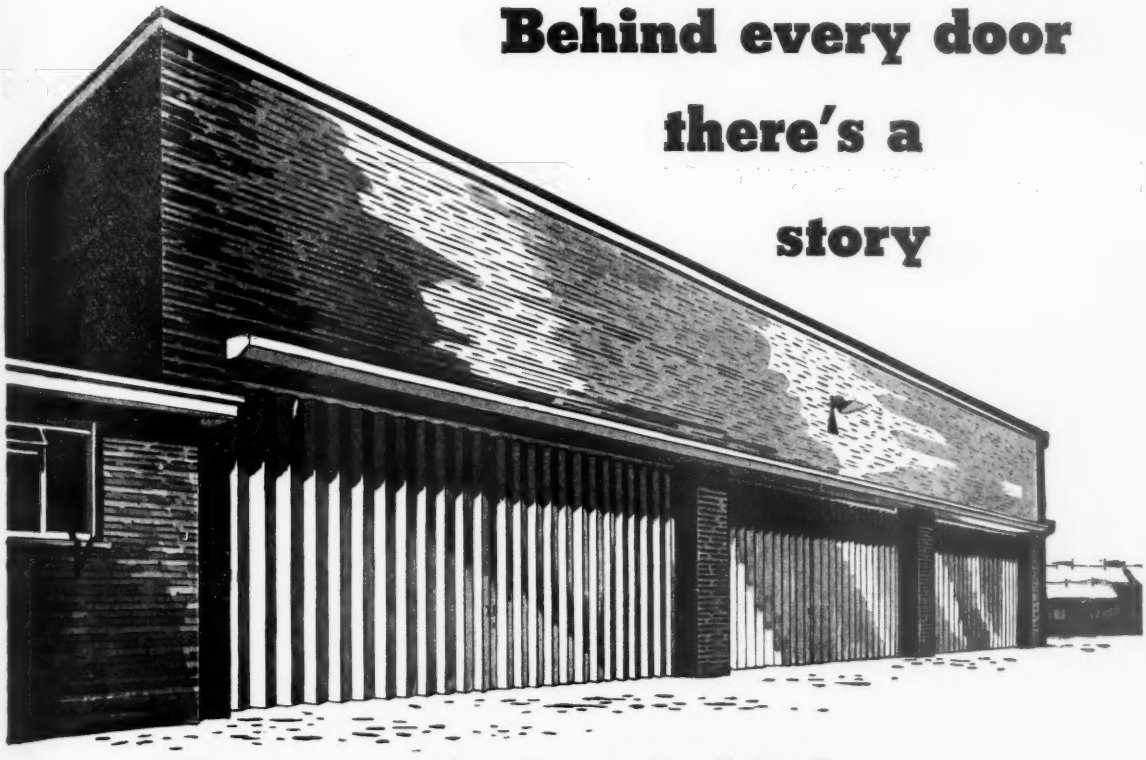

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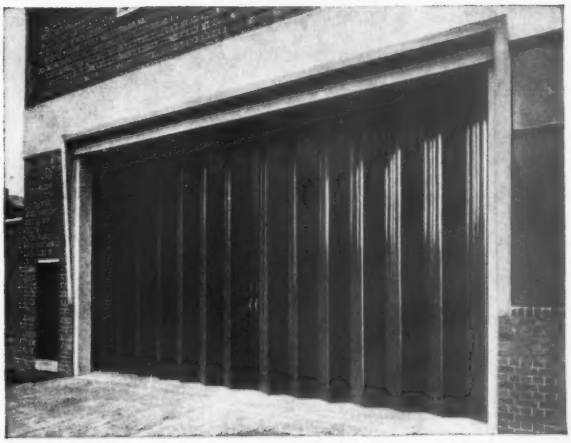

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At this detail above opening North light glazing, it was necessary to provide a weather trim to the movable glazing frame incorporated in the aluminium section, which normally closes off the decking at this point.

Accuracy was essential to give a site clearance of 3/16" over many hundreds of feet and was achieved by fabricating a special aluminium closure consisting of three separate sections welded together.

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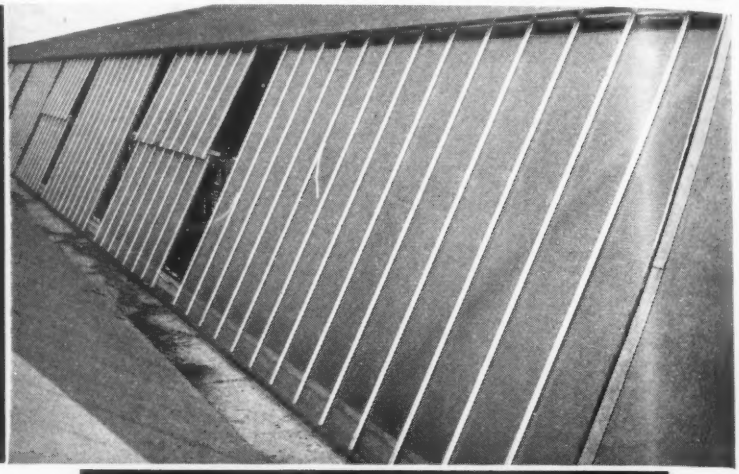
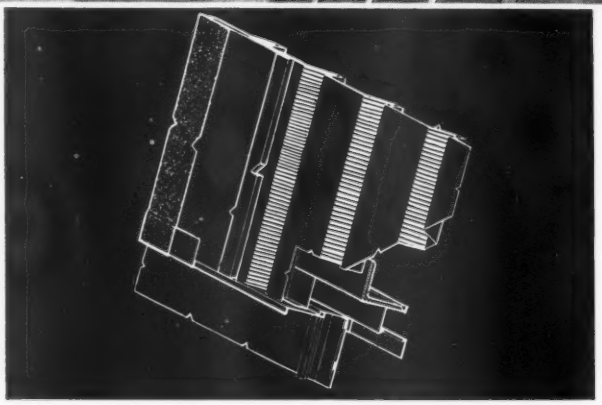
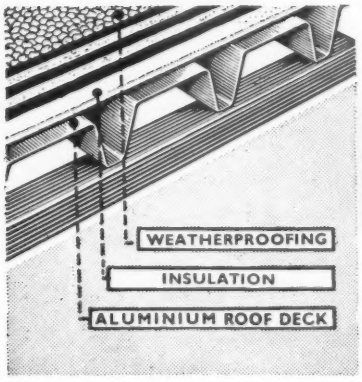


The resources, technical knowledge and experience of the Briggs Organisation are at the disposal of every Architect and Engineer. Consult our nearest area office for further details of Briggs Technical Design Service.





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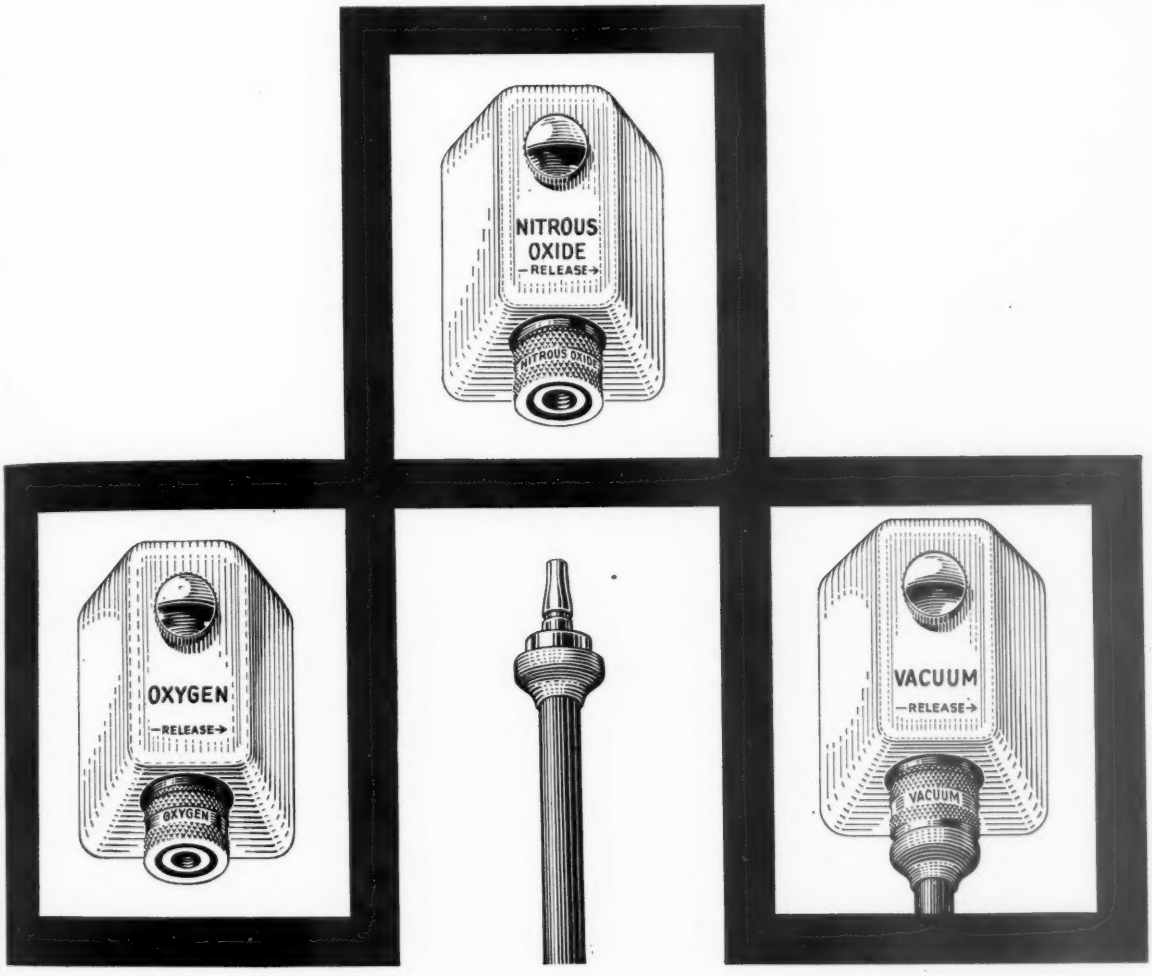

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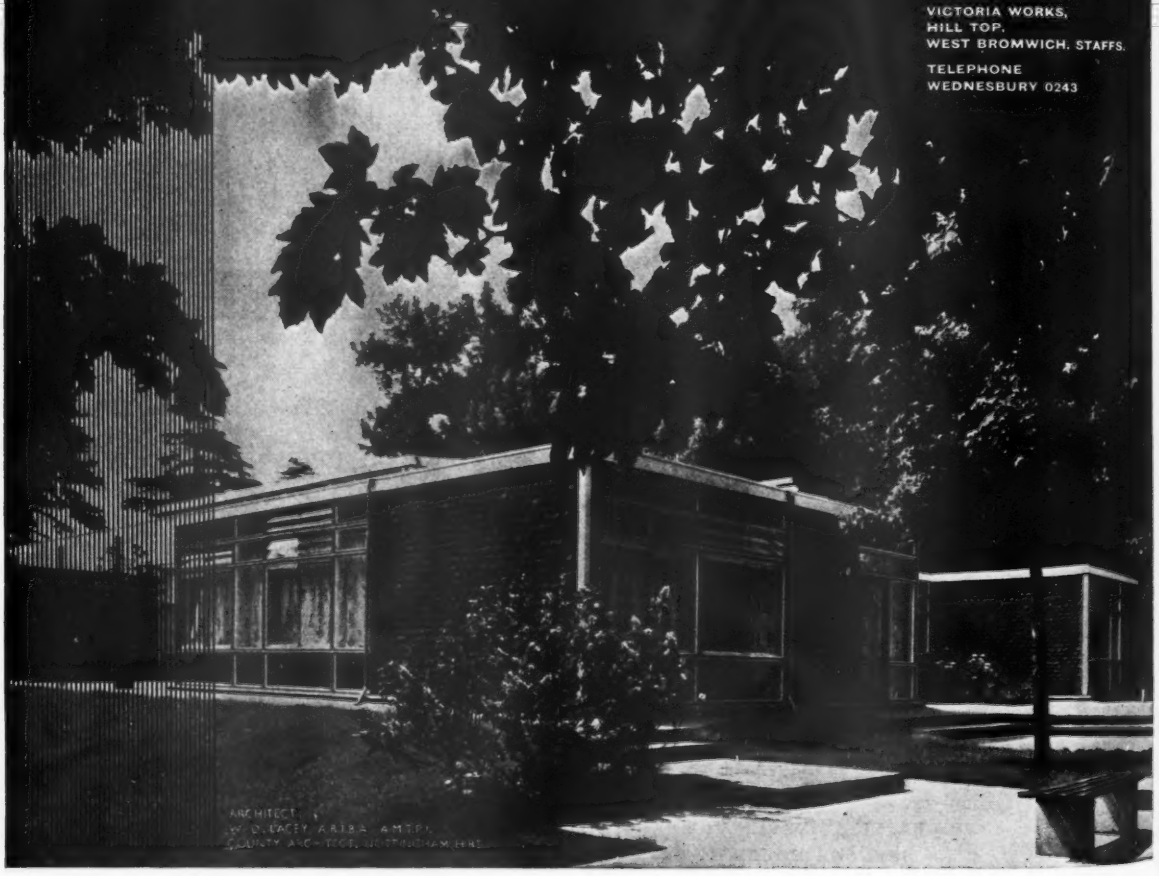

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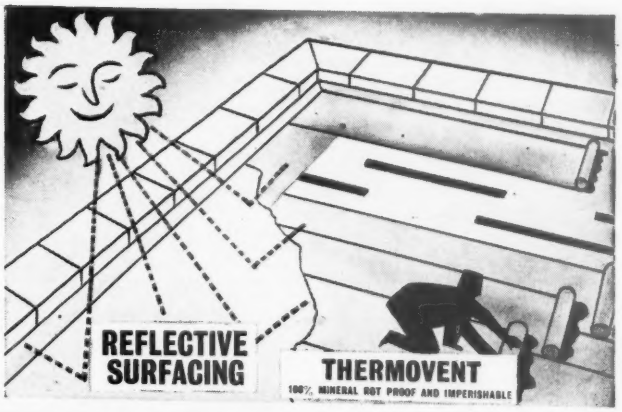
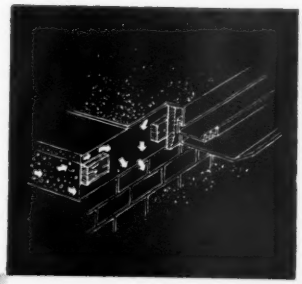
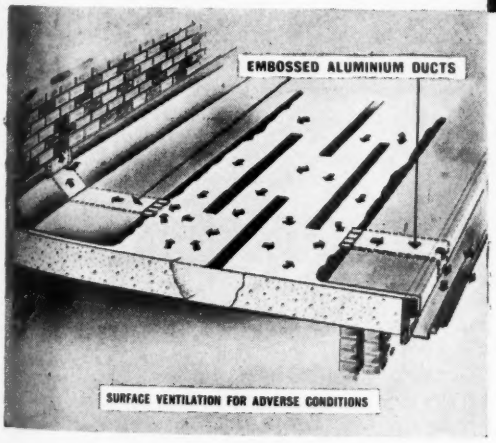


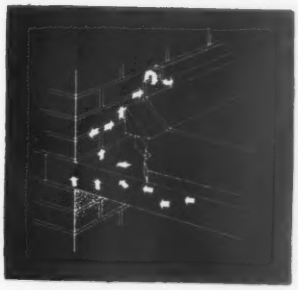
Where conditions are adverse surface ventilation is provided and metal ducts are fixed to relieve pressure to the outside air.



Drying in depth for extreme conditions is arranged at planning stage.



Typical detail is shown but others are available to suit design and advice will be given on request.



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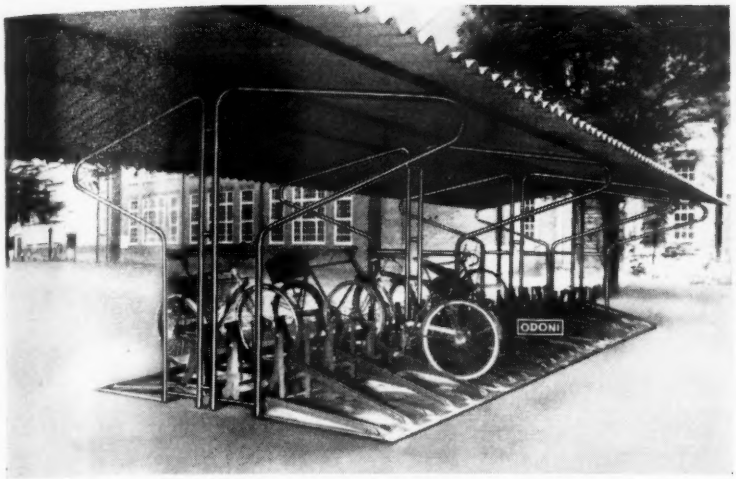

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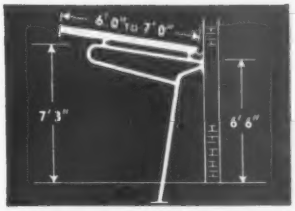

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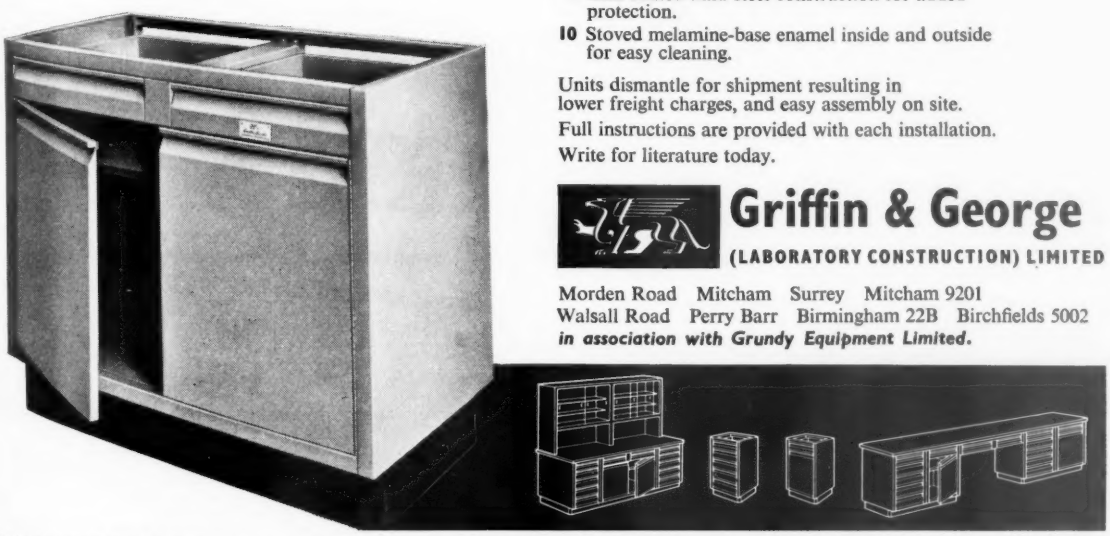

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M17

1810

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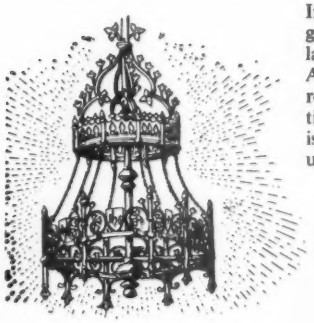

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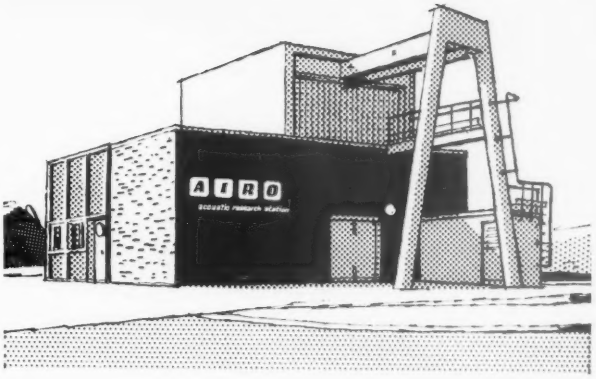

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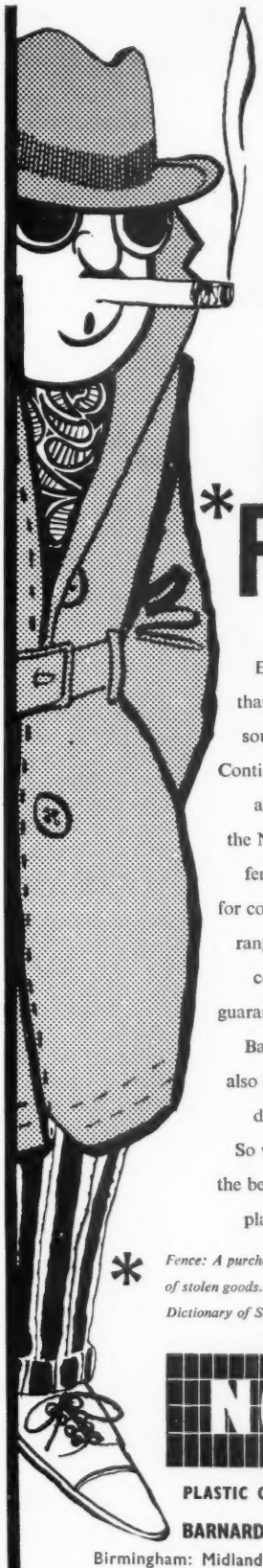

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* *Fence: A purchaser or receiver, and/or a storer of stolen goods.—*
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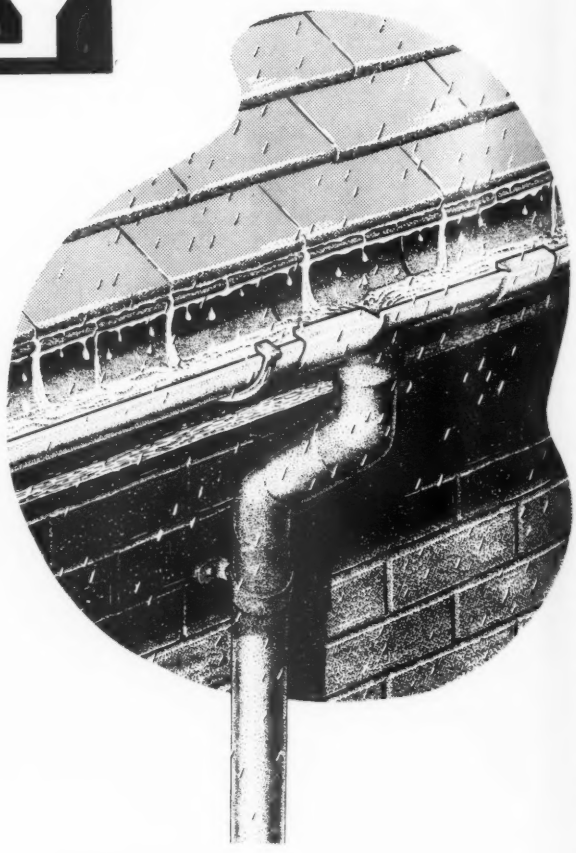
The New P.V.C. RAINWATER SYSTEM

the most advanced design of rainwater system yet developed



7 good reasons why you should install or specify RYMWAY

- RYMWAY is a complete and self-contained system—nothing else is required apart from a few simple tools.
- Made from tough, non-ageing P.V.C. with adequate impact strength to withstand shocks from ladders and normal forms of misuse.
- Extremely light in weight and easily handled.
- Easily and rapidly fixed—the gutter fittings and fascia brackets only require a snap-action to secure the gutter firmly in position—no cementing, drilling or screwing of the fittings. Factory fabricated joint sealers.
- Requires no painting or maintenance.
- Gutters and pipes can be easily cut with a hacksaw—no wastage or preparation of ends.
- An entirely corrosion resistant and leak-proof system.

The RYMWAY P.V.C. Rainwater System provides an inexpensively priced range of rainwater goods which have many advantages over conventional goods at present in use.

It is the result of an extensive period of investigation and testing of the basic requirements of a sound, reliable and easily fixed installation. RYMWAY is manufactured and marketed by three firms already well known as suppliers of quality products to the Building Industry—Yorkshire Imperial Metals Limited, Redland Tiles Limited and P. H. Muntz & Barwell Limited—and represents the most advanced design of rainwater system yet developed, with a full appreciation of the varied requirements of both large and small building contractors.

It is supplied COMPLETE with die-cast aluminium fascia brackets, plastic pipe clips and all fixing screws.

Send for details to:-

YORKSHIRE IMPERIAL METALS LIMITED—P.O. Box 166, LEEDS. Telephone: Leeds 72222.

REDLAND TILES LIMITED— Castle Gate, REIGATE, Surrey. Telephone: Reigate 4781.

P. H. MUNTZ & BARWELL LIMITED— Alexandra Works, WEST BROMWICH, Staffs. Telephone: Tipton 1246.

Printed in Great Britain by Unwin Brothers Ltd., Woking and London
All communications regarding Advertisements in this Journal should be addressed to the Advertisement Manager, R.I.B.A., 66 Portland Place, London, W.1
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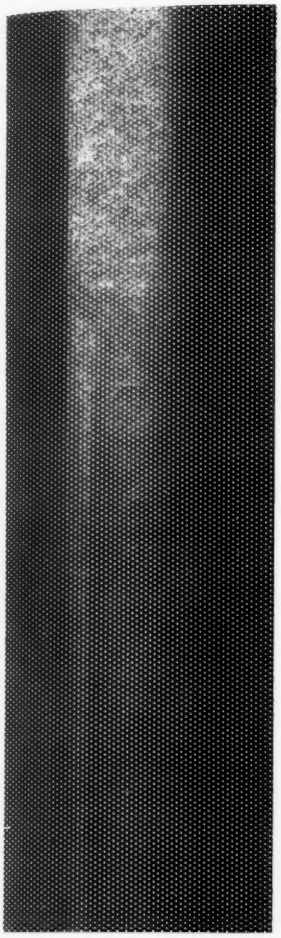

EXPOSED FACE AT HAMMERSMITH

The Wolfson Institute built by Holloways for the University of London Post Graduate Medical School. This unusual building has three lecture theatres with a capacity of 700.

The concrete to the external walls is just as it left the moulds, with the imprint of the wooden form-work standing out in relief.

Architects: Lyons, Israel & Ellis

Holloway Brothers (London) Ltd.,
157 Millbank, Westminster, S.W.1.

HOLLOWAYS

BRITAIN'S LARGEST HYPERBOLIC PARABOLOID STRUCTURE

Work is in progress on the foundations and basement area of the new Commonwealth Institute on a 3¼-acre site, to the south of Holland Park, on Kensington High Street. A feature of the design will be the roof of the exhibition block, consisting of one shell concrete hyperbolic paraboloid and four side warps constructed of pre-stressed concrete beams supporting wood-wool slabs, all of which are covered by copper sheet. The walls are to be of *Thermalite* building blocks clad externally with curtain walling of coloured opaque glass.

New Commonwealth Institute

Architects: Robert Matthew and Johnson-Marshall

The exhibition block, housing permanent exhibitions of Commonwealth countries, will contain three galleries, pierced under the main paraboloid to form a large central well, which will unite the gallery floors and permit long diagonal views of the curving roof planes indirectly lighted by concealed clerestory windows.

A two-storey linking block, containing art gallery, cinema, studios, public assembly rooms and restaurant, will join the galleries to the four-storey administration block. The ancillary buildings will have a reinforced concrete structure, and will be clad with precast concrete panels and brickwork. Large window areas will allow fine views across Holland Park and over the grassed forecourt.

LAING

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